

An Ontario-Developed Online
Special Education Teacher Course Model for China

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Abstract

This study investigated the effectiveness of an Ontario-developed online Special Education teacher training course as a model for in-service teacher professional development in China. The study employed a mixed method approach encompassing both a quantitative survey and a qualitative research component to gather perceptions of Chinese and Canadian teachers, educational administrators, and teacher-educators who have intensive experience with online education, Special Education, and teacher preparation programs both in China and Canada. The study revealed insufficient understanding of Special Education among the general Chinese population, underdevelopment of Special Education teacher preparation in China, and potential benefits of using a Canadian online teacher training course as a model for Special Education in China. Based on the literature review and the results of this study, it is concluded that online Canadian Special Education teacher in-service courses can set an example for Chinese Special Education teacher training. A caveat is that such courses would require localized modifications, support of educational authorities, and pilot testing.

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CHAPTER ONE: INTRODUCTION

A dream is like grass; weak but strong ~ Hekun Gao

This study examines the efficacy of using an online Special Education teacher training course developed in Ontario, Canada as a model for use in China. It explores the potential benefits and problems associated with applying a Western model of online teachers' professional development in Special Education in China's teacher training system by gathering the perceptions of education students, teachers, and administrators familiar with the education system in both Canada and China.

In Ontario, programs for teacher professional development in education, or more specifically Special Education, have existed since 1994 (T. Di Petta, personal communication, January 9, 2013), while Canadian distance education via mail and later by radio has existed since the 19th century (Faille, 1999). In China distance education has also existed for hundreds of years but online education has only recently started to be adopted as infrastructure and technical requirements for online delivery are put in place at the country's higher education institutions. Online teacher professional development in China is rare and online Special and Inclusive Education training for teachers—defined as the online preparation of teachers to understand and work with special needs students or children with exceptionalities in regular classroom settings—is virtually unheard of. This study explores some of the issues and implications of using an Ontario-developed online Special Education teacher training course as a model for Special Education teacher training in China.

Background and Rationale

Since the start of the 21st century, Special Education and Inclusive Education have become major components of educational systems across North America and Europe and are beginning to be adopted and adapted for education systems around the world. In fact, Winzer and Mazurek, (2011) noted that, “Over the past 3 decades, the concepts and practices of special education, and in particular inclusive schooling, have assumed the momentum of a general globalized phenomenon” (p. 1). Providing Special Education teachers with specialized knowledge and practical training is one of the most important issues in education today. The development of Internet-based education has greatly transformed teachers’ training and professional development, especially North America. In Ontario teachers’ additional training or professional development beyond the initial pre-service phase of teacher preparation is regulated by the Ontario College of Teachers (OCT) and has been predominantly offered through online courses since 2000. This study examines the potential for using the online Special Education training model used in Ontario as a vehicle for online teacher professional training in Special Education in China.

Feng (2010) notes that Special Education in China is rapidly becoming an important component of the Chinese educational system but it still falls short of the standards or availability of training and resources available in most Western educational jurisdictions. Feng notes that the majority of teacher training programs in China still lack a curricular focus on, and resources or training opportunities for learning to work with,

students with exceptionalities or special needs in the regular classroom (p. 18).

According to Wang and Xiao (2012), there is a dearth of Special Education teachers-training programs in China because Special Education teacher training is only offered in a very limited number of normal universities and colleges as opposed to general teacher education. Moreover, as Feng observes, “Schools as well as local governments encounter challenges of supporting effective diagnosis and funding for teacher professional development” (p. 18). Yu (2010) suggests that despite tremendous effort, China has not yet reached international standards or expectations with regard to preparing teachers for Special and Inclusive Education due to a variety of cultural and financial/funding reasons (as cited in Feng, 2010, p. 19).

Meanwhile, in Ontario, Special Education courses have been an essential component of all pre-service teacher programs for more than 20 years and online Additional Qualification (AQ) courses in Special Education have been providing teachers with up to 300 hours of additional teacher education professional development training in Special Education for more than a decade (T. Di Petta, personal communication, January 9, 2013). Therefore, it is logical to assume that the Ontario model of online Special Education teacher preparation could be adopted in China, but research is needed into how such a Western model of Special Education would fit into the Chinese education system. By addressing such a gap in knowledge, this research may strengthen cultural communication and discussion between Special Education educators and researchers in Canada and China.

Personal Rationale

The research focus of this study was only decided upon after much consideration and personal reflection. At the beginning of my Master in Education program, I was interested in online education because I believed that online approaches to teaching and learning might offer economical and practical ways to enhance educational opportunities in China, where I attended school and where I hope to return to work after graduation. When I first came to Canada to study, I heard an interesting story from my driving instructor that reinforced my interest in online education. The instructor told me of a friend of his who was enrolled in an online Master's program at the University of Chicago and I was shocked because this was the first time I had ever heard of a complete graduate level degree being offered via online study. In China this was not possible and is still not available as an option to graduate students; however, I asked myself, why not?

I determined then to learn more about the possibility of having such programs in China. I wondered if an online approach to education and teacher training could be an appropriate way to enhance the quality of Chinese educational programs for learners especially in rural or remote areas where educational resources and the number of schools were limited. I also wondered about the relationship between conventional face-to-face classroom instruction and online education and wondered if Canadian online education programs might benefit or could be adapted to the needs and systems of the Chinese education system and, more specifically, for use in teacher preparation or training. That was my initial point of interest in online education when I began my

Master of Education program and it was only after taking courses in Educational Leadership, Administration and Change Theory, and Invitational Education that I decided to focus my research on how Canadian approaches to online teacher training might work in a Chinese setting. According to Novak (2002), “If the school ecosystem is made up of people, places, policies, programmes and processes, educational leaders can find ways to celebrate successes in these areas and apply steady and persistent pressure to make each area better” (p. 132). This study therefore seeks to examine the efficacy of using an Ontario online teacher training course in Special Education as a model for online Special Education teacher training in China.

According to Di Petta, Novak, and Marini (2002), there are many myths about the use of online education and administrators and educators need to be prudent in their decision-making about how and when to use online education. Heeding that advice, this study asks educators, administrators, and students who have experienced the education systems of both Canada and China for their perceptions and insights into the viability of using an Ontario-developed model for Special Education teacher training in China. This study used a questionnaire and interviews as well as a review of the relevant research literature to explore this timely and important subject.

I selected Special Education as the focus of the online teacher preparation research after being introduced to the topic by my academic supervisor and reading a variety of research articles on the topic of Special Education in China. I found Special and Inclusive Education to be an interesting and important topic because of its increasing

social importance in China, and because of my own spirit and sense of humanitarianism.

On a more mundane level, I also found that Special Education in China was an understudied area of research to which I could make some contribution as a researcher and educator. As Feng (2010) and Wang and Xiao (2012) have noted, although Chinese understanding and approaches towards Special Education have evolved very quickly in recent years, there is still considerable room for growth and a need for improved training and education systems to prepare teachers for working with special needs students. This study provides another step in the process of moving forward to better understanding of what online education can do for teachers and students involved in Special Education in China.

Purpose of the Study

This study examines the efficacy of using a Canadian online Special Education teacher training course as a model for use in China. It examines both the benefits and barriers to using an Ontario-developed online Special Education AQ course designed to provide teacher professional development in the area of Special and Inclusive Education as a model for Chinese Special Education online teacher training. The study used questionnaires and semi-structured interviews to gather the perceptions and opinions of a group of classroom teachers, educational administrators, and teacher-educators familiar with the education systems of both Canada and China to determine whether an Ontario-developed online teacher training course in Special Education can be adapted or used to help prepare teachers in China for working with special needs learners or students

with exceptionalities in their classrooms. A review of the relevant research literature associated with online education, Special Education in Canada and China, and teacher professional development informed discussion of the findings and recommendations for further study. The study examines participants' perceptions and beliefs about online education in Canada and China and provides a brief overview of online education in the two jurisdictions. Participants were asked their thoughts on the benefits or barriers they envision in using such an Ontario developed online course in China.

Conceptual Framework

This study examined the efficacy of using an Ontario-developed Special Education online AQ course as a model for use in China's teacher education system. It sought to gather the perceptions of a group of classroom teachers, educational administrators, and teacher-educators who have first-hand experience of the education systems in both China and Canada and who have some degree of exposure to online education. It is reasoned that the above mentioned practitioners who are familiar with the educational practices and attitudes of both countries can provide valuable insight into the efficacy of transplanting or adapting an Ontario-developed online course into China's teacher education environment. Their perceptions and understandings of online education in both countries, as well as their knowledge of approaches to teachers' training in both countries including Special Education teacher training provides an invaluable resource for examining how one country's online education courses might be applied in another cultural and political setting. Filtered through a literature review on the relevant issues of

online education, teacher preparation, and Special Education training for teachers in the two countries, the findings from the questionnaires and interviews that form the core of this study provide ample data for an informed discussion of the efficacy of using one country's approach to online teacher professional development in Special Education in another jurisdiction which is culturally and politically very different from the other.

Significance of the Study

This study examining the efficacy of using an Ontario-developed online Special Education teacher training course as a model for use in China provides important new perspectives on the practical use of online education technologies and curriculum in new and emerging international areas. Findings from this study may well be generalizable to other subject areas and have significant implications for developing curriculum practices and policies when using one country's approach to online learning in a specific subject area like Special Education teacher training or second-language learning or professional training in new and different cultural, political, and social settings and contexts. Finally the study may help pave the way for further study in the area of international online teacher preparation programming and provide a starting point for offering an online Special Education teacher training course for China's teachers in Canada. It has been noted in the research literature and in the comments made by participants in the study that teachers' training programs in Special Education in China are insufficient in quantity, availability, and instructor expertise and thus this study may provide a way for an Ontario-developed online Special Education program to assist in the development of

Special Education expertise in China. Future research in this area might include the possibility of a pilot test of an Ontario-developed online Special Education program being offered to schools and teachers in China. Finally this project is also significant in its encouragement of greater understanding, communication, and cooperation between Canadian and Chinese educators and researchers around teacher professional development, online teacher education, and Special and Inclusive Education.

Limitations of the Study

Limitations for this study include the small number of interview subjects owing to the requirement for experience with online education in Special Education and teacher preparation programs in both Canada and China. Given the time and funding constraints involved in finding participants in China, the participant pool represented a convenience sample; however, it still provides significant data and findings that are valuable to all researchers and education students interested in international online teacher education. The lack of a pilot test of the Ontario-developed online Special Education course in China is also a limitation but a pilot test would require translation of existing curriculum and development of new curriculum for use in Chinese schools which, although certainly a recommendation for future research, is beyond the scope of this study. Finally, since Special Education in China is a relatively new research area there is not a great deal of relevant literature and research available. Nonetheless, this study builds on what is available and contributes to the development of our understanding in that field of research.

As stated throughout this introductory chapter, this study examined the efficacy of using an Ontario-developed online Special Education teacher training course as a model for use in China. The following chapters present a review of the relevant literature, followed by a discussion of the research data, and the study's findings, implications, and conclusion.

CHAPTER TWO: LITERATURE REVIEW

This review of the research literature examines online education generally and more specifically the development and implications of online education in both Canada and China as it is applied to teacher professional development and the delivery of Special Education instruction for teachers. The literature on online teacher professional development in North America is extensive but less so for China. However an examination of the existing literature does reveal a number of key themes and topics that apply to this study, including: concepts of online education and teacher attitudes towards online learning, attitudes towards Special Education and Special Education training for teachers, and questions about the nature and implications of teacher training on teacher attitudes towards Special Education and Special Education training for teachers. The review helps establish questions for examining the implications in terms of benefits, costs, and consequences of moving teacher professional development for Special Education from a traditional classroom model to an online model in China.

Online Education

Online education is defined as the design and delivery of educational curriculum or programming via Web or Internet based systems, including Learning Management Systems (LMS) ranging from proprietary systems such as Blackboard or WebCT to open source systems such as Isaak/Sakai (the system used for the Special Education course delivery discussed in this study). Online education is a phenomenon that swept the global education sector in Western countries starting in the early 1990s and currently dominates

educational distance delivery worldwide (Anderson, 2008; Canadian Council on Learning, 2009; Carpenter, 2010; Simpson, 2012). The literature on online learning mentions numerous terms that are often synonymously used to define or describe online learning. According to Anderson, (2008), “terms commonly used for online learning include e-learning, Internet learning, distributed learning, networked learning, tele-learning, virtual learning, computer-assisted learning, web-based learning, and distance learning” (p. 16). Moreover, definitions for online learning tend to be broadly all-encompassing, such as the definition posited by Carliner as “educational material that is presented on a computer” (as cited in Anderson, 2008, p. 17); Khan’s definition as “an innovative approach for delivering instruction to a remote audience, using the Web as the medium” (as cited in Anderson, 2008, p. 17); and the Joint Information System Committee’s (JISC’s) interpretation of online education as “the application of technology to learning” or “technology-enhanced learning” (as cited in Pachler & Daly, 2011, p. 16). The JISC emphasizes that technology

adds value to learning by enabling:

- connectivity to information and to others
- 24/7 access to learning resources
- greater choice over time, place, and pace of study
- alternative modes of study: distance, blended work-based, partially or wholly campus-based
- knowledge-sharing and co-authoring across multiple locations; opportunities

for reflection and planning in personal learning spaces

- rapid feedback on formative assessment
- more active learning by means of interactive technologies and multimedia resources
- participation in communities of knowledge, inquiry, and learning
- learning by discovery in virtual worlds
- development of skills for living and working in a digital age. (As cited in Pachler & Daly, 2011, p. 16)

The research literature from China corresponding to online learning suggests the following definition: “an approach of information dissemination and communication based on Internet without abandoning correspondence education and Radio and TV long-distance education, that is also defined as the third generation long-distance education or modern long-distance education” (Zhang, Xie, & Wang, 2011, p. 199).

While online education is a new technology, it is important that researchers and educators do not fall into the trap of regarding it with a horse-and-carriage lens; that is to say, using an old-fashioned lens to observe or work with a modern phenomenon.

According to Bransford, Brown, and Cocking, “effective learning is community-centered, knowledge-centered, learner-centered, and assessment-centered” (as cited in Anderson, 2008, p. 47). From this learning perspective online education supports all of the conditions for effective learning but it requires specific teacher skills and understanding as well as significant participant involvement. “The effective online teacher is constantly

probing for learner comfort and competence with the intervening technology, and providing safe environments for learners to increase their sense of Internet efficacy” (Anderson, 2008, p. 47). As for students or learners online often the amount of information can be overwhelming (Anderson, 2008, p.49) requiring users to be self-monitoring and self-assessing in their work even in online education’s highly collaborative environment (Anderson, 2008, p. 49). Anderson (2008) noted that

The enhanced communication capacity of online learning, as well as the focus of most adult online learning in the real world of work, however, provide good opportunities to create assessment activities that are project- and workplace-based, that are constructed collaboratively, that benefit from peer and expert review, and that are infused with opportunity and requirement for self-assessment. (p. 50)

Wilson described the characteristics of online community participants as “having a shared sense of belonging, trust, expectation of learning, and commitment to participate in and contribute to the community” (as cited in Anderson, 2008, p. 51). However, Anderson (2008) also mentioned “participation in a community of learners almost inevitably places constraints upon this independence—even when the pressure of synchronous connection is eliminated by use of asynchronous communication tools” (p. 52). As Anderson notes, the warning to be taken from any analysis of the potential of online education environments is that “the flexibility of virtual communities allow for more universal participation, but a single environment that responds to all students’ needs

does not exist” (p. 52). Conversely, as Deal (2002) reports, the principal benefit of online education for most institutions and budget officers is that it is an economically sound method of course delivery and student access to education, since “many forms of distance learning involve little or no cost in accessing online courses” (p. 22) although the initial technological infrastructure costs are high and will take time to pay down.

While online education offers lots of benefits, it also poses some challenges. Myths and misunderstandings of what it is and what it can do abound (Di Petta et al., 2002). First, it is a challenge for teachers to translate class-based courses into a web-based course (Li & Irby, 2008); similarly, Coyner and McCann (2004) doubt that assignments currently used in classroom courses will be easily applicable to online learning environments. Second, in the virtual world, the students’ manners may not be controlled. Laird states that online educators often complain about their students being rude and demanding, and “online students are much more likely to question grades, to ask teachers for extended deadlines or to cajole the instructor into assigning more lenient and undeserved course grades” (as cited in Lyons, 2004, p. 453). Third, teachers’ personalities would be affected, as some of the great qualities of teachers, such as humour, are hardly reflected online. Lyons (2004) expressed the opinion that “humor, or an approachable personality, is difficult to put over using email or in a course site” (p. 453).

Other myths about online education include, as Di Petta et al. (2002) described, the view that online education is easy to evaluate, that it equals better learning or will revolutionize education, that best online practices are already known and developed fully,

that more technology means better schools, and that online education saves teachers time and money (pp. 21-28). Njenga and Fourie (2010) suggest that “e-learning can replace human interaction” (p. 203) but they argue that the view that online learning’s “disregard of the cultural, social, economic and political contexts of the learners should be reconsidered” (p. 203). Finally, Njenga and Fourie warn that it is important to realize that it is a myth and a costly road to follow to believe that “establishing the infrastructure (hardware and software) in e-learning is the most difficult part” (Njenga & Fourie, 2010, p. 207). The following section looks at the development of online education in Canada and China as an introduction to exploring how an Ontario-developed online course in Special Education might work in China.

Online Education Development in Canada and China

In China, long-distance education has existed since the age of Confucius. Zhang et al. (2011) note that Confucius traveled across China to pass along his knowledge, thoughts, and methods indirectly in one of the earliest train-the-trainer models of education which could be regarded as the start of the distance education model. Travelling scholars teaching other instructors who would then travel to remote areas and teach may have been the earliest form of distance education in China, but it was not until the foundation of the People’s Republic of China in 1949 that Chinese long-distance learning can really be said to have started. From 1949, three types of distance education emerged in China: correspondence long-distance learning or self-learning; Chinese agricultural radio and China Educational Television; and most recently online education

via the Internet which is rapidly gaining in popularity and governmental support (Zhang et al., 2011).

According to Zhang et al. (2011), the primary reasons for the rapid rise and popularity of online distance learning in China are governmental favour and policy support and the increasing support for and adoption of online systems by China's major higher education institutions (pp. 199-200). In 1998, the state council of the People's Republic of China approved and published a policy by the Ministry of Education called *21st century education revitalization action plan*. An entire chapter of this lengthy document is devoted to the development of "modern long-distance learning projects, forming an open-style educational network and creating life-long learning systems" (Ministry of Education, 1998, para. 33). In the *Action Plan* document, the government proposed five ways to improve online education development in China, including enlarging the data transmission volume of CERNET (China Education and Research Network); developing satellite long-distance learning and connecting it with CERNET; developing high quality educational software; establishing developmental strategies for modern long-distance learning and improving continuing educational system. In 2004, the Ministry of Education put forward another policy directive authorizing "accelerating the upgrading and expansion project of CERNET and CEBsat (China Education Broadband Satellite) and positively participating in the new generation of Internet and ChinaGRID construction" (Ministry of Education, 2004, para. 70) and "improving the application level of modern information technology in the educational system" (para. 72).

China's Ministry of Education's (2010) outline of educational development to 2020 titled *Outline of the National Medium- and Long-Term Program for Educational Reform and Development (2010-2020)* states that by 2030, China will accelerate the construction of basic infrastructures for educational information technology, constructing a national information management system and strengthening the construction of network educational resources. It is a governmental objective, therefore, to have Chinese online education become a dominant educational factor in China within a decade. Given the size of China and its population, such a task is no small feat.

Increasing China's online education capacity and capability is also an educational institutional objective for the country's top 10 schools. To meet that institutional objective in 1994, "the 10 key universities in China established CERNET as an example project. This was the first (Chinese) public computer network based on TCP/IP protocol" (Zhang et al. 2011, p. 200). By 2003, there were 68 universities offering online education for 2.3 million students across China. In contrast Canadian universities currently have approximately 1.3 million annual registrations in at least one fully online course (Contact North, 2012).

In Canada, long-distance and online education has been available for many years. Similar to China, correspondence education played a large role in the early years of distance learning in Canada. In 1889, Queen's University in Ontario provided the first correspondence courses and in those areas where formal mail service did not exist, the North West Mounted Police (now the Royal Canadian Mounted Police) was charged with

delivering course material to remote locations and learners (Faille, 1999).

In the 20th century in Canada, the evolution of long-distance learning accelerated as any children without the chance to be enrolled in primary and secondary education (such as the children of lighthouse keepers or soldiers in remote areas) were required to receive correspondence education. Later, after the development of radio, the *Farm Radio Forum* was initiated with the cooperation of the Canadian Broadcasting Corporation (CBC), the Canadian Association for Adult Education, and the Federation of Agriculture, and became a hugely popular educational medium for distance learners in remote areas. The development of the Canadian National Film Board (NFB), also increased opportunities for informal distance learning and from the 1970s (until the 1990s), a series of institutions in Alberta, Qu ébec, British Columbia, and Ontario were formally created to provide distance education opportunities for Canadians. In Ontario, the Ontario Educational Communication Authority (ECA) was created to promote distance education and as in the other three provinces, the ECA promoted the use of a variety of technologies including telephone, radio, audiocassettes, and audioconferencing as tools to deliver distance learning. In the 1990s, computer conferencing and online learning were introduced and today these technologies have become the primary distance delivery system in the country (Canadian Heritage, 1994; Faille, 1999).

Online education in Canada started approximately in 1994 and has developed steadily since its introduction. Faille in 1999 noted that “while print is still commonly used, audiocassettes, videocassettes, radio and television have lost ground to the

increasingly popular Internet” (p. 7). According to the Canadian Council on Learning (2009), the e-learning has “made a remarkable transition into Canadian schools and businesses” (p. 34). Unlike China, where interest in online education was largely driven by governmental decree, Canadian online learning development was driven by high student demand, institutional needs, and training needs.

One of the principle forces driving online education forward worldwide is high student demand and another driver is the increasing development and adoption of mobile information and communication technologies such as tablet devices, smartphones, and smart networked television systems for learning (Contact North, 2012). Moreover, government financial support for students has declined in recent years and cost for higher education has increased substantially driving a need for lower cost alternatives to the traditional face-to-face education model (Contact North, 2012).

Another driving factor to the demand for online education in Canada and North America more generally is institutional needs. Academic institutions across North America are constantly seeking new ways to improve their existing functions as institutional costs rise, funding sources decline, and faculty shortages develop (Contact, North 2012). One of strategies is online systems and online programming as a means of attaining a return on significant investment in Information Technology infrastructure investment (Contact North, 2012). The other benefits include the removal of geographic barriers between institutions and students, lower tuition fees, improved learning and accessibility, and avoidance of campus emergencies (Canadian Council on Learning,

2009; Carpenter, 2010).

The final driving factor for online education in North America is business training needs. This point mainly consists of two ideas: (a) online learning represents \$56.2 billion of the global training industry and is estimated to grow to \$107 billion by 2015 (Contact North, 2012); and (b) online learning is the second most widely used and important training method used by North American organizations (Contact North, 2012).

Online professional education in North America is increasingly the principal delivery system for a range of professions from accounting and business in-career training to teachers' training and professional development. For a variety of cost, convenience, and competition factors, online teacher professional development is quickly becoming the primary form of teacher professional development in Canada and it currently accounts for 80% of teacher professional development in Ontario (OCT, 2013b).

Teacher Training in Canada and China

In both Canada and China, teachers' education has two components: pre-service education prior to formal recognition as a teacher, and in-service training or professional development after certification or formal recognition of professional standing. In China pre-service training is completed in what is referred to as "normal" universities dedicated to education and lasts about 4 years in a full-time program. These universities generally undertake the in-service training of teachers as well as initial teacher preparation.

Increasingly in China, more and more non-teacher education colleges or non-normal

institutions have developed, making the teacher training system more flexible and diverse.

This phenomenon reflects the latest change in Chinese teachers preparation, as Shi and Englert (2008) described:

In the new system, 70% of the effort that prepares and trains teachers is undertaken by normal (teacher) institutions of higher education, while the other 30% of effort is contributed by general comprehensive institutions of higher education which became involved in teacher education through establishing schools of education on their campuses. (p. 356)

In-service teacher education in China is divided into two categories: degree and non-degree education. According to Feng (2010), “degree education includes not only the ‘top-up’ education for in-service teachers without certificates but also the ‘upgrading’ education for in-service teachers with qualified certificates. The non-degree education for in-service teachers is the main part of continuing education” (p. 17). At the same time, most of these in-service education programs are classroom-based and there is little evidence of Internet involvement in this process.

In Ontario, teacher education also consists of pre-service and in-service education but both are subject to oversight and control by the OCT which accredits pre-service programs every 5 years and accredits in-service AQ courses annually. In-service courses in Ontario are generally AQ courses offered by a variety of AQ providers including Faculties of Education, Teacher Federations, school boards, and a limited number of off-shore providers approved by the Ministry of Education. (OCT, 2013a, 2013b, 2013c)

Special Education Teacher Training in Canada and China

In China, until 1980s, there were almost no Special Education teacher training programs (Feng, 2010; Kritzer, 2011). Before then, there was no mature teacher training programs for special education in China, although it has primary styles of teacher training like some short and intensive training classes and disperse “masters training their apprentices” (Wang & Xiao, 2012). However, the last 30 years saw significant development in Special Education teachers training programs, and “The growth in special education teacher training programmes has been remarkable” (Ellsworth & Zhang, as cited in Feng, 2010, p. 18) After 1998, China experienced two significant reforms on Special Education: (a) modifications of training systems for Special Education teachers, meaning that all such teachers will be trained in postsecondary schools, both in vocational institutions and universities; and (b) the implementation of free Normal education programs allowing many more teachers to be developed across the country. Several leading Normal universities including China’s renowned Beijing Normal University began to enroll doctoral graduate students in Special Education in 2000 (Wang & Xiao, 2012).

Regarding pre-service training, the Chinese Special Education teacher training system has been basically built up from the vocational college level to the graduate level. “Approximately 20 post-secondary institutions initiate the major of special education and about 15 institutions initiate major of special education of college level” (Wang & Xiao, 2012, p. 22). The institutions’ curriculum in Special Education includes: (a) much

similarity among various public fundamental courses which are controlled by government; (b) both basic and specialized courses related to Special Education in conjunction with a Special Education major; (c) different duration of Special Education courses in different levels of institutions; and (d) a huge difference between university and college; in the former, there are more Special Education theory courses compared with relevant practical skills, while in the latter the opposite is true (Wang & Xiao, 2012).

As for in-service training, Special Education teacher training still presents a difficult problem. Until now, there has been no well-developed in-service training system for Special Education in China, and the existing programs are always inconsistent, too general, and lack practical value (Wang & Xiao, 2012). The main styles of teachers' in-service training involve the following situations: (a) conference discussion organized by relevant societies; (b) short-term training; (c) degree studies; (d) long-distance learning, especially for teachers from remote and rural areas; and (e) professional lectures. At the same time, some unofficial training for Special Education teachers still exist, such as expert teachers teaching in person, visiting advanced schools, and so forth (Wang & Xiao, 2012).

In Canada, especially in Ontario, the Special Education teacher training program can be divided into two parts: (a) Special Education courses integrated into the teachers' college program, and (b) AQ courses for Special Education. The OCT's (2010, 2013d) website shows AQ courses in Special Education for administrators that include the following components:

1. Ontario Curriculum and Policies (OCT, 2010, p. 4)
2. The Ethical Standards for the Teaching Profession and the Standards of Practice for the Teaching Profession (OCT, 2010, p. 4)
3. Theoretical Foundations of Special Education for Administrators (OCT, 2010, p. 4)
4. Instructional Leadership/Setting Directions (OCT, 2010, p. 5)
5. School Culture/Building Relationships and Developing People (OCT, 2010, p. 6)
6. Securing Accountability (OCT, 2010, p. 7)
7. Shared Support for Learners. (OCT, 2010, p. 7)

These AQ courses could be offered in conventional ways (e.g., “small group interaction, action research, presentations, independent inquiry, problem solving, co-operative learning, and direct instruction”) (OCT, 2010, p. 8), or via online learning, whereby “Instructors may use technology to support candidates’ learning via on-line interactive communications, connections to quality resources and links to other sites” (OCT, 2003, p. 7).

However, in China, although educators have utilized some long-distance approaches to enhance the quality of Special Education teacher development, it is still being used in a small scale so that its convenience and powerful function have not been fully explored; however, it is obvious that online approaches for Special Education teacher training will be a future trend. Last year, five departments of the Chinese government issued a policy aiming to “positively promote the inner combination between information technology and special teachers’ training, and construct an internet-based research and learning virtual community for special education teachers” (Ministry of

Education; State Commission Office for Public Sector Reform; National Development and Reform Committee; Ministry of Finance; & Ministry of Human Resources and Social Security, 2012, para. 5).

CHAPTER THREE: METHODOLOGY

This study used a triangulation, mixed methods research design. According to Clark and Creswell (2010),

The triangulation mixed methods design is a set of procedures that researchers use to simultaneously collect both quantitative and qualitative data, analyze both datasets separately, compare the results from the analysis of both datasets, and make an interpretation as to whether the results support or contradict each other. (p. 302)

In the quantitative part, the study incorporated a questionnaire (survey) with a Likert scale to illustrate participants' existing general knowledge on Special Education teacher preparation programs among Chinese and Canadian people. In the qualitative part, a narrative and grounded theory research design was used to complement component the survey and to explain the efficacy of introducing Ontario-produced courses into a Chinese context.

According to Clark and Creswell (2010),

Survey research designs are procedures in quantitative research for administering a survey or questionnaire to a small group of people (called the sample) in order to identify trends in attitudes, opinions, behaviors, or characteristics of a large group of people (called the population). (p. 175)

According to Clark and Creswell, surveys have the following four characteristics: First, they seek to identify the attitudes or behaviors of a large group. This study's sought to

determine the extent of Canadian and Chinese participants' knowledge about Special Education and related teacher training programs. Second, the researcher chooses a large number of participants randomly (Clark & Creswell, 2010). In this study, 22 classroom teachers were chosen randomly to complete the survey. Third, the researcher utilizes the questionnaire to illustrate the trends, and lastly, the researcher makes conclusions for a large population (Clark & Creswell, 2010). In this case, I will provide a conclusion on the degree of general acknowledgement for Special Education issues among a general Chinese and Canadian population.

Narrative Research Design

According to Creswell (2013), "narrative can be both a method and the phenomenon of study. As a method it begins with the experiences as expressed in lived and told stories of individuals" (p. 70). Creswell (2013) also notes that the procedures of conducting narrative research will have to: (a) determine if the topic is fit for this approach; (b) select one or more individuals who have stories and gather the useful information in different categories; (c) consider different ways of collecting data; (d) learn about the context of their stories; (e) "restory" the stories we heard into a logical framework; and (f) involve participants in the research positively. The narrative approach is a good fit for this research because the study seeks to reveal how participants perceive their training experiences, especially the Special Education components. "Narrative research is best for capturing the detailed stories or life experiences of a single individual or the lives of a small number of individuals" (Creswell, 2013, p. 74). Participants

interviewed for this project have experienced the teacher training program, especially Special Education programs, both in China and Canada. The interviews elicited participants' stories, which were then analyzed to help reach a conclusion.

Grounded Theory Research Design

“Grounded theory is a qualitative research design in which the inquirer generates a general explanation (a theory) of a process, action, or interaction shaped by the views of a large number of participants” (Strauss & Corbin, as cited in Creswell, 2007, p. 63). This project sought to determine the extent to which Ontario-developed online Special Education courses could be used in the Chinese teacher training process so that a new process or theory could emerge. According to Creswell (2007), “grounded theory is a good design to use when a theory is not available, but they were developed and tested on samples or populations other than those of interest to the qualitative researcher” (p. 66). The process involved three stages: open coding, axial coding, and selective coding. Meanwhile, a central phenomenon which relates to the research question was identified as well as other causal conditions, strategies, context, and intervening conditions in order to reach a theory of the strategies of introducing Canadian programs into a Chinese context. In this study, an interview was used as a basis of analysis to put forward a theory.

Data Collection

This project used document review and interviews as two main ways to collect data. The review of related literature revealed the history and current situation of online education in Canada and China, along with related theories on online education and

valuable experiences of international Special Education practitioners. The interviews with Special Education training recipients in both countries shed light on the participants' opinions in regards to the efficiency of online approaches used in the Canadian context and the benefits and barriers of introducing such approaches in China. In addition, observations and audiovisual materials supplemented the data.

Interview Process

Gall, Gall, and Borg suggest there are three types of interviews: (a) informal conversations, (b) general interviews using a guided approach, and (c) standardized open-ended interviews (as cited in Turner, 2003). This study used open-ended interviews, because the latter method “allows the participants to contribute as much detailed information as they desire and it also allows the researcher to ask probing questions as a means of follow-up” (Turner, 2010, p. 756). In this way, participants can fully express their opinions and the interviewer can ask additional probing questions. In addition, it helps the researcher to reduce the bias because of the multiple perspectives of participants who provide a broader range of information (Turner, 2010). However, a disadvantage of this approach, as Turner (2010) states, is that “Since open-ended interviews in composition call for participants to fully express their responses in as much detail as desired, it can be quite difficult for researchers to extract similar themes or codes from the interview transcripts as they would with less open-ended responses” (p. 756). During the questionnaire designing process, this point was alleviated by concentrating the interview questions into several themes to make sure “the questions

are...focused on understanding your central phenomenon in this study” (Creswell, 2013, p. 163).

The interview process included the following steps: “thermalizing the inquiry, to designing the study, to interviewing, to transcribing the interview, to analyzing the data, to verifying the validity, to reliability and generalizability of the findings, and finally to reporting the study” (Kvale & Brinkmann, as cited in Creswell, 2013, p. 163). The interview design also incorporated McNamara’s tips for the interview process: like “(a) choose a setting with little distraction; (b) explain the purpose of the interview; (c) address terms of confidentiality; (d) explain the format of the interview; (e) indicate how long the interview usually takes; (f) tell them how to get in touch with you later if they want to; (g) ask them if they have any questions before you both get started with the interview; and (h) don’t count on your memory to recall their answers” (as cited in Turner, 2010, p.757).

Ethical Considerations

In this project, the ethical considerations mainly addressed two points. First, the interviews with research participants, including questions designed needed to comply with the research protocol and relevant ethical rules. An official ethic review process was undertaken and the Brock University Research Ethics Board issued its permission to conduct interviews (File no. 12-246-Di Petta). There was no evidence that any participants would be involved in any kind of psychological or physical risks. On the other hand, there could have been some ethical issues during the interview process; for

example, some explicit cases or examples of Special Education the interviewee mentioned would require confidentiality. Consequently, such ethical concerns were taken into account during the entire research process.

CHAPTER FOUR: PRESENTATION OF RESULTS

This study examines the efficacy of using Canadian online Special Education courses for teachers as a model for Special Education teacher training in China. A mixed methods research design including both quantitative survey and qualitative interviews was used, along with the related literature review to explore the view of people who have background or experience with teacher-preparation programs in Canada and China, or experience of Special Education training programs in Canada and China. The interview candidates in the study are participants who are most knowledgeable about these topics, (i.e., online education, teachers' education, and Special Education in Canada and China.

This study's data analysis comprises a thematic analysis of the questionnaire (see Appendix C) and a content analysis of the interview scripts informed by a review of the related literature. In this chapter, a detailed description of the data analysis and its results will be presented.

In the process of conducting the survey, 22 questionnaires were distributed and eventually 18 valid and completed surveys; that is to say, approximately 81.81% of potential participants returned questionnaires and provided their opinions on Special Education in China and how online Special Education training for teachers in China based on a Canadian model might work. Before the description of the survey results, I will introduce the general background of the four participant interviewees. Interviewee A is a Canadian university instructor with experience of both Chinese and Canadian schools and teachers' preparation programs; additionally, Interviewee A also has

experience designing and testing online courses for teachers in Canada. Interviewee B is also an instructor in the field of teachers' education in a Canadian university and has taught teacher education programs in both Canada and China; Interviewee B also has some experience with online education and Special Education. Interviewee C is an instructor in a Faculty of Education who was a principal in a Canadian elementary school and has worked for a regional school board as a curriculum supervisor and Special Education teacher with the title of Special Education Specialist. Interviewee C has been in China and has worked with Chinese educators several times in the area of Special Education. Interviewee D is a former Chinese graduate student in Canada who graduated from a Chinese Special Education teachers' preparation program and worked as a Special Education teacher in China. These four interviewees provide a rich vein of knowledge and independent data to further ideas about the potential of Canadian online Special Education to serve as a model for online Special Education courses in China.

In next section, survey data are presented along with the initial analysis of the data. The analysis of the data is presented in four themes which help to clarify the research questions of the study: Participants' definition of Special Education; Attitudes towards Special Education teachers' training; Attitudes towards online Special Education teachers' training; and Beliefs about the efficacy of using Ontario-style online Special Education courses in China.

Participants' Definition of Special Education

In this research, questions in both questionnaire and interviews examine

participants understanding of Special Education and their perceptions of the approaches to teaching students with special needs. Questions 1 to 3 in the survey specifically target participants' definitions and understandings of Special Education (see Appendix C).

The results from the data presented in Questions 1, 2, and 3 suggest that all educators or classroom teachers feel that they generally do not quite understand the concept of Special Education and the teaching approaches of Special Education. In Question 1, 77.8% of all participants felt that they do not know much about Special Education and how to approach teaching Special Education. Questions 2 and 3 further examine the participants' knowledge of Special Education in China or in Canada, asking if Special Education should include both students with mental or physical disabilities and students identified as gifted and talented students. While the majority (in Question 2, 11 participants) felt that Special Education is for students with mental and physical disabilities, Question 3 revealed that there are more people who accept that gifted and talented people should also be included in Special Education. From the results of Questions 2 and 3, it is concluded that participants did not have a clear and complete understanding of Special Education, which is also indicated in some of the interviews. As the majority of participants in this study come from the Chinese educational system, the results of Questions 1, 2, 3 support the need of Special Education teachers' training in China. Interview responses support the view that participants felt that they do not have a satisfactory understanding of what it is, who it applied to, or who should learn about it in Special Education.

Table 1

Results of Survey Question 1: I Know About Special Education and How to Teach Special Education Students (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=8 (44.4%)	N=5 (27.7%)	N=3 (16.7%)	N=1 (5.6%)

Table 2

Results of Survey Question 2: Special Education is for Students Who Are Physically or Mentally Disabled (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=2 (11.1%)	N=5 (27.8%)	N=0 (0.0%)	N=9 (50.0%)	N=2 (11.1%)

Table 3

Results of Survey Question 3: Special Education Should Include Students Who Are Gifted or Talented in Some Special Way (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=2 (11.1%)	N=2 (11.1%)	N=1 (5.6%)	N=8 (44.4%)	N=5 (27.8%)

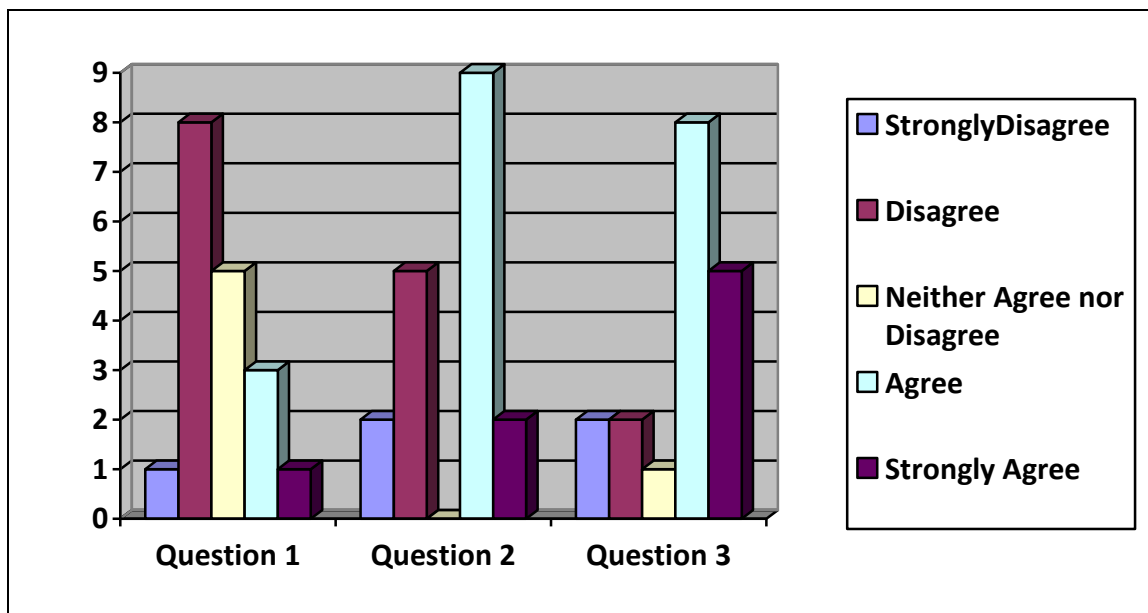


Figure 1. Comparison of questions 1, 2, and 3.

For example, Interviewee A, who is a trained teacher in China, states: “I remember there is no special training in my teachers training process” (June 3, 2013).

For the same question, Interviewee D noted that:

In China, even though you are the people who have received higher education, you may say why do you want to choose this major? Now, the people who have received education do not know what Special Education is and feel it's strange.

Also, it seems very remote from them. In Canada, if you take a person with special needs walking around the street, basically 70%-80% of the public could accept this person with special needs, because they are fairly familiar with these people. So they will feel it is very common to see these people in the society, like the deaf-mute. They see them quite often so they may not feel strange and they think that people with special needs need to be cared. (June 16, 2013)

By contrast, most of the interview participants in this study have an understanding for Special Education, because they have had some exposure to Special Education in Canada and a few have some in China. Interviewee A, who has experience in both countries' educational system, stated,

In Canada, Special Education includes modification and accommodation.

Accommodation means all the students including the students with special needs have the same learning materials, but the requirements for these students with special needs will be lower. For instance, if we have a test of 100% full mark, the requirements will be 60%-70%. What is modification, for example,

you (student with special need) are in the Grade 3, but you cannot study mathematics of Grade 3, so we give you an individual plan to learn. (June 3, 2013)

I asked Interviewee B, who has received teacher training both in Canada and China, “From your experience, if you have the students with special needs in the classroom, what will teachers do, generally?” Interviewee B responded by saying:

In my class, initially, I will receive a document from administration, confidential information about certain disabilities, so I at least always have that statements providing to students in the course outline, I put and inform all students so they can approach me if they have special needs. If I receive those letters, I will identify those students and talk to them privately, to ask them if they have any courage to talk to me if they need special support. (June 8, 2013)

Here, we could see that some teachers who have been familiar with Canadian educational system have a good understanding on Special Education and how to teach Special Education teachers.

In regard to the definition of teachers’ preparation in Special Education, Interviewee B claimed that

It’s to prepare teachers to be ready or to have a good understanding about how to teach, how to involve in the situation with students that have special needs, whether special needs on the difficulties or they are more advanced and need special attention. (June 8, 2013)

Interviewee C said, “I, for example, have Special Education qualification as specialist, so I took three Special Education courses, three summers” (June 11, 2013). Interviewee D shared the following experience from a Chinese perspective:

I once graduated from a Special Education pilot college XXX in China. ...

There is no special school in China then and it is one of the earliest Special Education colleges in China, at that time, the whole country has no mature understanding for Special Education. (June 16, 2013).

Perceptions of Inclusive Education

Inclusive education, as a current Special Education approach, has expanded swiftly in these years all over the world; therefore, two questions specifically examined participants’ understanding of inclusive education and their opinion on its application in developing countries like China.

As shown in Table 4, in question 8, most people (61.1%) believe that the inclusive approach should be the fundamental component of Special Education; however, 22.2% of the participants chose a neutral response. This indicated there are still some people who feel confused about the inclusive approach of Special Education and a small number of survey participants (16.7%) still disagree with this trend probably due to the long-time influence of separate approaches to Special Education in China, or the specific situation corresponding to the huge population in China.

Table 4

*Results of Survey Question 8: Inclusive Education for Students With Special Needs
(Which Is an Approach to Include Students With Special Needs in Regular Classrooms)
Is and Should Be the Fundamental Component of Special Education (N=18)*

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=2 (11.1%)	N=4 (22.2%)	N=6 (33.3%)	N=5 (27.8%)

Table 5

*Results of Survey Question 9: The Inclusive Approach for Special Education Can Be
Used in Developing Countries With a Large Population, Like China, India, etc. (N=18)*

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=2 (11.1%)	N=4 (22.2%)	N=6 (33.3%)	N=5 (27.8%)	N=1 (5.6%)

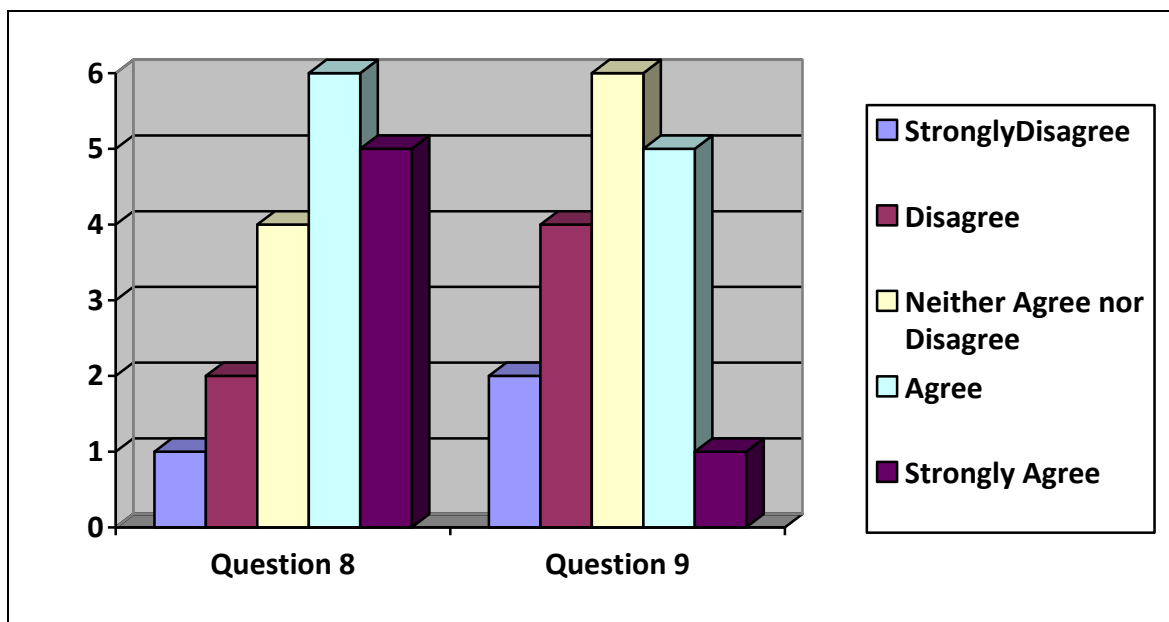


Figure 2. Comparison of questions 8 and 9.

Question 9 asked respondents to indicate their views on the application of inclusive education in developing countries like China and India. As shown in Table 5, respondents held different opinions on this question: 33.3% of the participants answered strongly disagree and disagree, 33.3% of the participants chose the neutral option, and 33.4% of the participants answered agree and strongly agree. The reasons for such a divergence are quite significant. The large portion of participants who chose neutral somewhat complicated this inquiry. Also, it is worth noting that 11.1% of participants strongly disagreed, slightly more than those who strongly agreed with this opinion, which shows there must be some substantial reasons which made people think it is not an appropriate approach in Special Education in developing countries with large populations such as China and India. Actually, for the latter countries, both the literature review and interview data suggest that large populations would have a negative influence on developing inclusive education. Jianghua and Meng (as cited in Worrell & Taber, 2009) noted that overpopulated classrooms puts sand in the wheels of Chinese inclusive education's development.

Attitudes Towards Special Education Teacher Training

This section reviews the questionnaire and interview data related to Special Education teacher training. Two questions pertained to this topic: Question 4 asked respondents to indicate if they thought regular teachers should be trained in Special education (see Table 6), and Question 5 asked respondents to indicate if they thought regular teachers would benefit from online Special Education training (see Table 7).

Table 6

Results of Survey Question 4: All Regular Teachers Should Be Trained in Special Education (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=2 (11.1%)	N=3 (16.7%)	N=4 (22.2%)	N=7 (38.9%)	N=2 (11.1%)

Table 7

Results of Survey Question 5: Regular Teachers Would Benefit From Being Trained in Special Education Components via Online Education (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=2 (11.1%)	N=2 (11.1%)	N=9 (50.0%)	N=4 (22.2%)

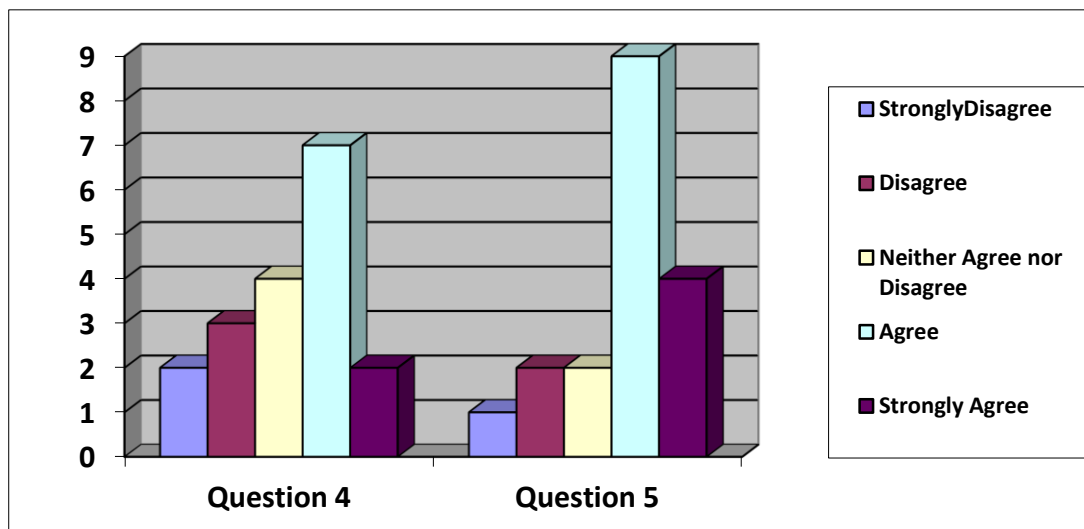


Figure 3. Comparison of questions 4 and 5.

Questions 4 and 5 related to the issue of whether teachers should be trained in the field of Special Education and whether online Special Education courses could be used to enhance regular teachers' professional ability. As shown in Table 6 and Figure 3, half of the participants think regular teachers should be trained in Special Education, 28% of the participants disagree or strongly disagree, and the rest gave a neutral answer. This reflects a major divergence on this issue. A certain number of people do not think it is necessary for regular teachers to be trained in Special Education, and they do not think that professional training in Special Education is significant for regular teachers.

The latter responses results may have a number of reasons. One of the major problems may be the ignorance and underestimation of the importance of the inclusive approach for Special Education. The interviewees shared stories with me that might explain their reasoning; Interviewee A, for instance said,

When I was a teacher in China, I taught high school, we never thought about the plan of Special Education, because the people who studied badly cannot go into high school. Even if there are some students like this (students with special needs), the schools and teachers basically ignore them. When I was in primary school, there was a student in my class and do not study well; however, the teachers do not have any individual plan to him, in one word, the teachers ignored him. (June 3, 2013)

The respondents' indifference or negative responses related to Special Education training may also be attributed to insufficient resources:

Also, in China, the students with special needs are not emphasized enough because we do not have enough economical capacity to take care of them. In Canada, it has more economic capacity to take care of all people. Meantime, from the perspective of recognition of Special Education, although we have some special school like deaf specialized school, the degree of emphasizing special education still has a long distance compared to Canada. Nevertheless, after these 10 years economical booming period, the people's conception will change because you have stronger capacity to take care of them. (June 3, 2013)

The distinction between Special Education and regular education in China may also explain the respondents' reasoning; Interviewee D said,

Chinese regular education and Special Education has a pretty clear distinction, nearly all of the teachers in Western countries have the ability of Special Education. In China, the teachers in special schools could know the theories of Special Education and the regular teachers in regular schools do not have much conception of Special Education. This kind of training is very little actually. When we started to promote Special Education, the Western countries have already utilized inclusion, so the new conception of Special Education has come out in Western countries when we are still on the track of old conception. (June 16, 2013)

In reality, these kinds of opinions do exist in our society, sometimes even prevalently. "There is a popular opinion among regular classroom and subject teachers

that inclusion of students with special needs in their classes is a policy doomed to fail” (Jordan, Schwartz, & McGhie-Richmond, 2009, p. 535). Some interviewees also indicated that some people nowadays in China still think it is a waste of resources, as noted earlier. However, Jordan et al. (2009) argue that the positive beliefs towards an inclusive approach among teachers have more influence than the idea of regular classes without special needs students and a segregated approach in Special Education. Jordan et al. maintain that

Teachers who believe that it is their responsibility to instruct students with special education needs in their inclusive classes are more effective overall with all their students and are also more effective in working individually with students with special education needs. (p. 538)

Interviewee A supports such a position:

[In China] there is no programs which could tell you what to do and the awareness of Special Education is not enough. In Canada, I have attended one of the AQ courses before which focuses on students behaviours, through which it could be helpful for me to understand the conception of education for all. (June 3, 2013)

In China, this may be also the consequence of policy design and its dissemination process. The unclear policies, insufficiency of compulsory power, and unsatisfactory policy dissemination may also explain the underestimation of Special Education training among regular teachers. Deng pointed out that

Although there are some inclusive education teaches pre-service education policy, there is also a big gap between the policies and the reality. The reasons mainly conclude: 1) Chinese policies basically belong to ideal model; this top-down model of policy implementation tends to benefit more the policy macro planning; however, it may also lead to unsatisfied policy implementation at bottom level due to the lack of essential conditions. ...2) Most policies have the instructional and educational functions, the wording in the policies (like “should”) is pretty flexible and optional, and it has inadequate compulsory power, practical guidelines and even legally binding power. 3) The current text of policies do not have the conception of “inclusive education” distinctively, and the content of inclusive education teachers education only exist in the laws and policies concerning the disability people and special education, so the problem does not have sufficient attention from regular education. 4) The dissemination is also problematic, two thirds of regular normal universities said they don’t know about the relevant policies. (Wang and Xiao, 2012, p.318)

At the same time, by contrast, some of the teachers’ educators very strongly believe in offering Special Education training to pre-service teachers in teachers college. Interviewee B, who is a professor in the Faculty of Education of a Canadian university, said:

In my courses, I always encourage all of [teacher candidates] to consider [students with special needs] in their teaching. I require them to participate in this

process. They have to fit that in the blanket of course, extension-up or extension-down; extension-up means to make it more challenging, extension-down means it should be modified to accommodate. All you called modification, either makes it more difficult or easier for students to learn, when they have peer teaching. Furthermore, for more advanced classes for the secondary education I teach, I usually required at least one person play a role who pretend to be a student with different disabilities, each peer teaching session has different disabilities to learn how to teach those students with special needs. And then after that, we debrief to discuss how the class goes and what about the special needs students. Instructors talk about this, the student with special needs talk and the class discuss. (June 8, 2013)

Interviewee C (a Canadian educator) discussed the types of support the teachers could give to their students with special needs:

I think every class has a range of abilities, I think if you put 30-40 students in one classroom, even if none of them are recognized as special needs' student, there are still a range of abilities, some students learn more easily than others, some are self-motivated, some need more time to deal with their problems, like Mathematic problems. Some students need more time; a good teacher would recognize that and give students more time, we say putting special needs kids in regular classroom is a strain on teachers, I don't think so. If you are a good teacher, you accommodate their needs, if a student extremely needs, a child is

blind, or a child is severely mentally disabled, I think you have to find other students to help that student. Or if the school board has financial to put educational assistant, and some sort of adults who have special needs students (they could be helpful for teachers), if you are in the situation that you are not available, you try to accommodate them as much as you can, students are quite often the best helpers for fellow students they enjoy helping others, and I think the teachers get draw on students to help the weak ones. (June 11, 2013)

However, achieving the above in practice may be very challenging because the sheer number of students in China may make individual care difficult, and the exam-oriented system gives teachers greater pressure on students' academic results rather than the individual development of every student. Interviewee C, for instance, stated that

The difficulties in China are obviously schools are much larger, classrooms are more populated, whereas in Canada, we may have 20-30 students in the class, I see classroom in China would 60-65 students and that becomes much more difficult in terms of trying to interact students.

If we compare the academic results of students, everyone used the same test material, and some people who have special needs or gifted will not be reflected in the tests. They will drag our class down. In China, generally, the teachers should take care of 50 students, and they also need to take care of the students with special needs, not speak 5-6 students, even 1 student, it seems

very difficult. (June 11, 2013)

Three interviewees expressed the effectiveness of teacher training in Special Education, and how it could be beneficial to their teaching career. Interviewee A said, In Ontario, they integrate the students with special needs into the regular classrooms. The teachers should have the training programs like this which could give the teachers an idea of how to treat these students and how to design an individual plan to them in regular classroom. On one hand, the courses are provided for students with different ideologies such as variable learning styles and capacities and on the other hand, the courses could be provided to students according to their practical capability.

The training we have for teachers in the field of Special Education should be effective, if some students cannot catch up with the schedule, they may abandon their studies. If you have [Individual Education Plan], at least they will think there are some people taking care of them, and they would continue to learn without thinking that they belong to a certain group. Through this plan, they would probably return to the regular level in regular classes. (June 3, 2013)

When asked if he felt prepared to work with students with special needs in the class after being trained in Special Education, Interviewee B said, “I think so. In the practical situation and if I will be teaching in the school, I will make more efforts to attend those students’ needs and understand their background and get more material ready for planning, etc.” (June 8, 2013).

Actually, inclusive education is a global trend in the field of Special Education: Inclusion of students with disabilities into mainstream schools is a worldwide trend. A number of countries in the west (e.g. the USA, UK, Canada and Australia) now have legislation to promote inclusive practices. This trend has influenced educational policies in a number of developing countries. (Sharma, Forlin, & Loreman, 2008, p. 773)

Under the circumstance of inclusive education, training content on Special Education, especially inclusive education, is a necessity for regular teachers' training. "Training institutions are now required to ensure that pre-service teachers are competent to cater for the needs of an increasing range of diverse learners" (Sharma, Forlin, Loreman, & Erle, 2006, p. 80). Regular teacher training is also supported by UNESCO, which states that "this move has been furthered by international recommendations (now more than 12 years old) from UNESCO to include content on inclusion as part of teacher training programs" (as cited in Sharma et al., 2006, pp. 80-81).

Some interviewees expressed the importance of teacher training in inclusive education. Interviewee A said,

At this time, what we need is the comprehensive education, [we shall] educate all the people instead of not only teaching the majority people including gifted and slow learners. The pace of learning among students cannot be the same, so all of the teachers should be equipped with this kind of skills [Special Education] because at any time in any class you will meet with the people with special

needs. (June 3, 2013)

Interviewee C discussed something beyond teacher training at school. From his point of view, teachers could benefit not only from the training schools gave them, but also from a variety of training choices, such as teachers learning from teachers, and teachers learning from parents:

You get the theory and you try things in the classroom, you may see something works or doesn't work, then you read more theories to get a stronger foundation of understanding and go to change strategies, I think the tool theory-practice works at the end and I think even experienced teachers doing this for many years will go to read something or take a course in some aspects, if the strategies don't work, then go back to research to see what else can I do. The other component is teachers learning from teachers, I don't know what I am doing, and I have a student with autism in my classroom, I may turn to you because you have students with autism and teachers quite often learn from other teachers, what are you doing that works? What would you suggest I do with this child? I think teacher is learning from teachers. The other thing we must consider is learning from parents, go to the parents and parents live with the child, say to the parents, what do you do when you act in this way or doesn't pay attention, or struggle to get a concept. What do you do? Work with parents so back and forth, parents help the teacher, and teacher use the parents' strategies to try things would work. (June 11, 2013)

Interviewee D said,

In China, if the special teachers have been trained in Special Education, they will have a preparation in their mind. Nowadays, if some special schools recruit teachers, they need some students with a background of special education because they would not have a transition time. If the graduates have been trained in regular education, it is really a long time for them to transform and adjust because they did not receive any training before; therefore, it is a huge difference in terms of mental preparation and psychological enduring capacity. (June 16, 2013)

Hence, enhancing people's awareness of the conception of inclusive education and regular teachers training in Special Education should be prioritized in teachers' training schedules.

Question 5 was designed to test people's general attitudes towards online approaches utilized in Special Education among regular teacher training. According to the results, approximately 73% of the participants regard the online approach as an effective way to train regular teachers, which indicated that most participants held a welcoming and tolerant attitude toward the online Special Education approach. Some relevant literature also reflects this; for instance, Zhang et al. (2011) noted that

With the development of online distance learning, the enrollment rate is increasing, and meanwhile the opportunities of social powers participating into the distance learning is also enlarging. Apart from the pilot modern

long-distance education higher educational institutions recognized by MOE, after the search via Google search engine, under the category of “online education,” there are 62 online education companies, 89 online education web portals, 46 long-distance training and professional education organization of various kinds, and 115 online educational management system. ... Since online education is greatly promising, the whole society pay a great deal of attention to it. (p. 206)

When asked about the online approach for Special Education teachers’ preparation, the interviewees answered mostly in a positive way: nearly 73% of the participants answered agree or strongly agree (50% agreed and 22.2% strongly agreed). This indicated that a remarkable number of people support this approach with a cautious attitude. This is also reaffirmed in the interviews; although nearly all of the interviewees held a positive opinion for the online approaches used in teachers’ preparation in the future, they also touched on some of the possible challenges or shortcomings of using this approach. When asked about the challenges of introducing this online-based Special Education teachers’ education into the educational system in another country, Interviewee A said,

The developmental situation of Internet may be a challenge, that is to say, there should be the advantages in respect of hardware condition. Another important thing is the usefulness, by that I mean, whether this kind of courses are useful or not for teachers’ professional development in the future. The

chances are that when it is useful for the professional development of teachers, the teachers would be willing to attend it. The factor of interest is not enough; the thing is if you can apply what you learn into your teaching position. (June 3, 2013)

However, interestingly, some people think it is a myth to believe hardware is the most difficult part. Njenga and Fourie (2010) think “Although infrastructure is often believed to be the most important stumbling block in implementing e-learning, it has been proven that the people issue, resistance to change, is the most difficult part of implementing a new technology like e-learning” (p. 207). They think human’s attitudes are the most difficult factor in implementing e-learning, which is noticeably meaningful for further research.

From the perspective of disadvantages of online education, Interviewee B noted the following:

There are also some disadvantages, like you have to type in stuff for your responses instead of talk. If you talk in the classroom, if you talk for one minute, you have to spend 10 minutes to type it. These are some disadvantages. (June 11, 2013)

Some literature also reflected a similar idea; Di Petta et al. (2002) described a series of myths related to online education, including one that suggests “Online education saves teachers time” (p. 24); Di Petta et al. contend that “For many teachers and students, learning to work with online education is time-consuming, difficult, and

ultimately inconvenient” (pp. 24-25).

From participants’ responses, it is clear there are some issues worthy of further consideration, such as the hardware construction, people’s reluctance, and the necessity of face-to-face communication. All things considered, in teachers’ preparation for Special Education, online involvement may have a crucial place, but other influencing factors must be considered.

Attitudes Towards Online Special Education Teacher Training

Question 6 was designed to examine the general attitudes towards the topic, and whether online Special Education courses are an economical way to train Special Education teachers. Figure 4 shows clearly that 55.5% of participants chose agree and strongly agree, while 27.8% of respondents disagree with the statement and the other respondents chose the neutral answer. Therefore, the responses suggest that online Special Education courses, generally speaking, are an economical component of Special Education teachers’ professional development, but there are also some issues involved in it. Figuring out what kind of issues are involved in this topic and trying to improve the situation are vital for the development of this kind of course. Some interviewees expressed their opinions in support of online Special Education courses’ economical influence. Some literature shows that current economic constraints are one of the difficulties of developing a quality Special Education teacher preparation program in China (Deng & Harris, 2008).

Table 8

Results of Survey Question 6: Online Special Education Courses Are an Economical Solution to Teachers' Training for Special Education (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=2 (11.1%)	N=3 (16.7%)	N=3 (16.7%)	N=7 (38.8%)	N=3 (16.7%)

Table 9

Result of Survey Question 7: Online Teacher Training Approaches and Face-to-Face Approaches Should Be Combined to Promote Special Education for Teachers' Preparation (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=2 (11.1%)	N=1 (5.6%)	N=5 (27.7%)	N=9 (50.0%)

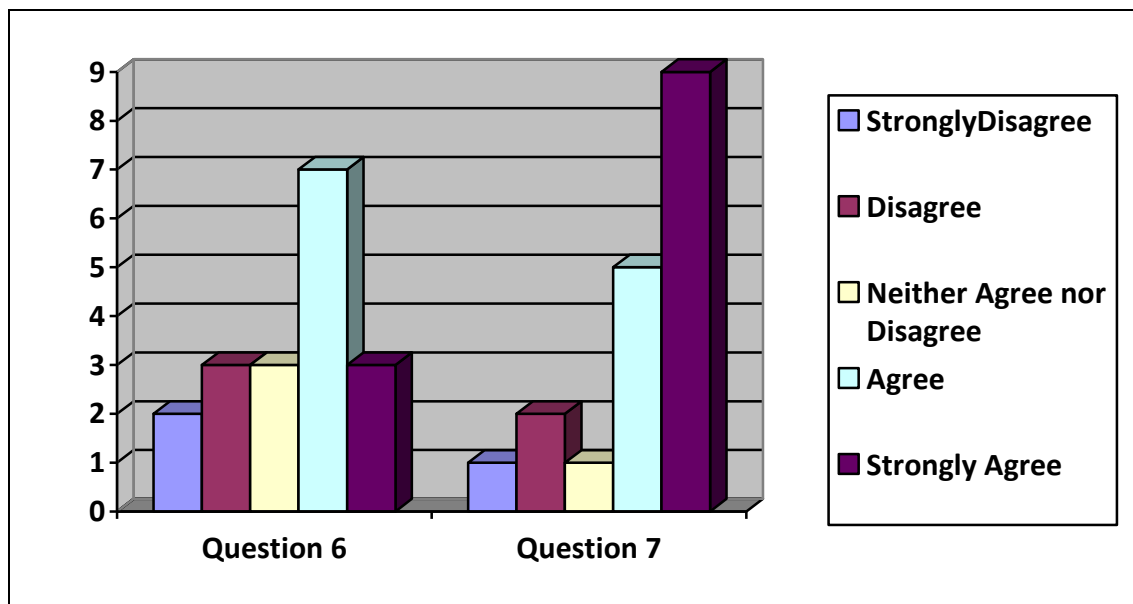


Figure 4. Comparison of questions 6 and 7.

When I asked the question “have you participated in any online classroom or workshops before?” Interviewee B responded,

Yes, I attended some workshops before, for revision of curriculum, for example, it was online, sometimes face-to-face, I think both have advantages, it (online approach) saves lots of time, travel expenses and other financial cost, so saving time and money and being efficient can be realized by many online workshops, for online course, I want to mention XX course, I think it is a good approach, the first time I took an formal online credit course, they are very rewarding, there might be some issues we need to pay attention to, first time, we learned we can have a very good online course. (June 8, 2013)

Interviewee B’s comments clearly show his favourable attitudes towards online education as well as the attitude that there might be some challenges involved in it. Interviewee C also shared his personal experiences as follows:

When I was a principal, I had three teachers on-site who were doing online special education courses, I work for teachers, after school, on their computers in their classroom, because they were struggling with something, in fact, I became their mentor, in the school, to help them with the courses which was quite away at XXX university in XXX. So, they were taking that course, it didn’t matter where the university was, it was convenient for them having their computers right there in the classroom, and we can dialogue back and forth. (June 11, 2013)

Interviewee C thus notes that the teachers he mentored could receive university education

from an institution that may be geographically far away from them have access to Special Education resources and training materials without incurring travel and accommodation expenses. Interviewee C discussed such benefits of distance education:

I see the benefits, because it would be very cost-effective, if you could provide courses online, because again when you think about Ontario, it has probably fewer than 200,000 teachers, Beijing alone will be more than 200,000 teachers; therefore, you are dealing with a huge issue of trying to provide a professional development for teachers in China, probably the most practical solution is online.
(June 11, 2013)

Still, consistent with the survey results, some scholars also discuss economic problems related to online learning. Di Petta et al. (2002) suggest that “the full cost of information and communication technology in schools are not easily measured for monitored. Infrastructure, maintenance, and upgrading costs are on-going and not a one-time expense for schools” (p. 25). Hence, while the economical benefits of online education are evident, the cost of the system maintenance and technology training must also be factored in.

Question 7 was designed to examine whether the conventional face-to-face educational approach and the online approach should be combined to develop the professional development of Special Education teachers. According to the research results, the majority of the participants (77.7%) chose agree or strongly agree, which indicated that the combination of both classical and modern teaching approaches is the

most popular and acceptable pedagogy for Special Education teacher training among participants. Additionally, some recent literature also reflected this opinion; for example, Nonaka and Takeuchi “aptly illustrated with their ‘knowledge spiral’ that tacit knowledge are transferred via socialisation” (as cited in Njenga & Fourie, 2010, p. 206) and “Even though e-learning does provide some means of interaction and socialisation (e.g., discussion groups), it could hardly replace all aspects of face-to-face socialisation and the resultant transferral of knowledge” (Njenga & Fourie, 2010, p. 206).

Meanwhile, some interviewees expressed the conversations; for instance, when asked, “What do you think of the online approach for teachers’ preparation?”

Interviewee C answered

Generally, I think there is a place for it. I also like the fact that you get students in the classroom; you can model what goes on in the classroom. I am in favour of it but I don’t want to go 100% of it, I think there is also a place for it but we also put students in the classroom. (June 11, 2013)

Interviewee B had a similar opinion:

Of course, for instance, you cannot see each other; you cannot see factual scenery, you cannot see classmates, for my case, I know instructors and students know very good about the climate, I didn’t know anybody so I may be in the dark to work on that. (June 8, 2013)

All in all, from the perspective of data analysis and literature, it is widely

recognized that two kinds of educational approaches could be combined and applied to deliver teacher education. While the online approach could provide convenience, face-to-face communication is still necessary to enhance the educational experience amongst students' online peers.

Attitudes Towards Canadian Online Special Education Courses

This section examines two aspects of participants' attitudes towards Canadian Online Special Education courses: (a) the promotion of Canadian online Special Education courses and (b) the need to modify Canadian online Special Education courses.

Promotion of Canadian Online Special Education Courses

In this part I discuss the possibility of introducing Canadian/Ontario-style online courses for Special Education based on the results of the survey and interviews. The first question, Question 10, was designed to examine participants' attitudes towards the efficacy of integrating Ontario-developed online Special Education teacher training courses into a mass-population context such as China and India. Slightly more participants (38.9%) agree that Ontario-based online courses are a good fit for countries like China and India compared to those who disagree (27.8%). A noticeable number of respondents neither disagreed nor agreed with the statement. This result indicates that participants do not have much confidence in the application of the Ontario-based online approach in largely populated countries such as China, so the difficulties and the reasons why the participants feel uncertain are worthy of a deeper investigation.

Table 10

Results of Survey Question 10: Canada's Online Special Education Courses to Prepare Teachers Are a Good Model for Large-Population Developing Countries Such as China and India (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=4 (22.2%)	N=6 (33.3%)	N=6 (33.3%)	N=1 (5.6%)

Table 11

Results of Survey Question 11: Canada's Online Special Education Courses to Prepare Teachers Is a Model Which Will Work Well Anywhere in the World (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=4 (22.2%)	N=8 (44.5%)	N=4 (22.2%)	N=2 (11.1%)	N=0 (0.0%)

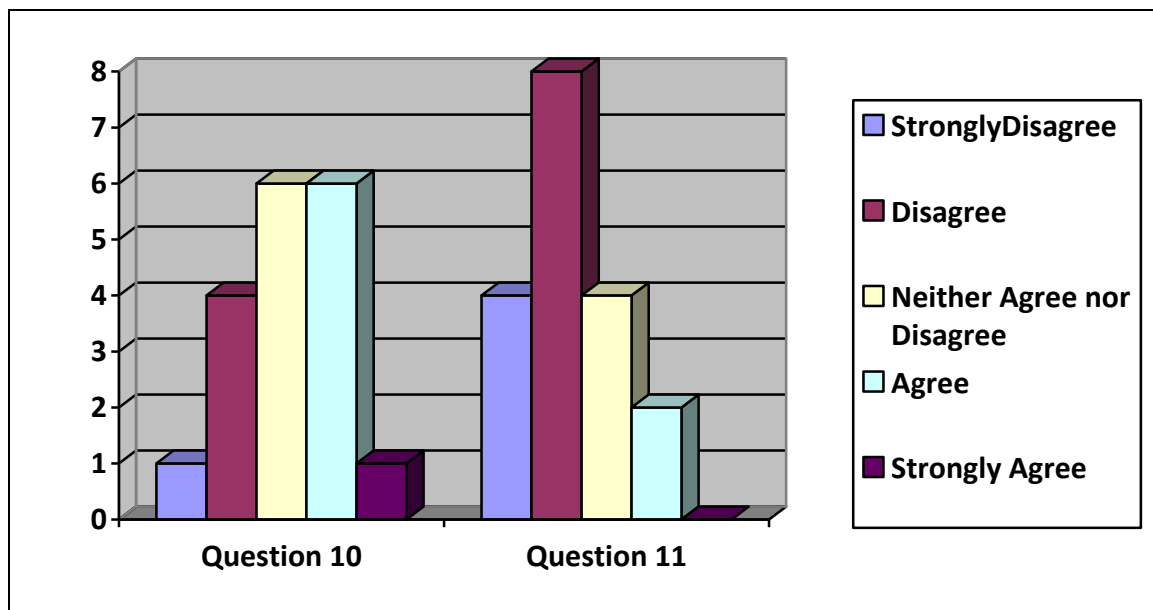


Figure 5. Comparison of questions 10 and 11.

Firstly, some educators believe that the Ontario-based online Special Education teacher training model would work well in China. For instance, Interviewee A said,

They are the same thing in different countries, it works in Canada, and it should work in China as well. As a special education teacher, you have experienced teachers' education so that you have already some foundations on teachers' educational theories and practical skills. So, attending an AQ course should be effective in their professional development. (June 3, 2013)

When asked, "If you took a 100-hour Special Education online course, would you feel more prepared to help these students with special needs in the future?" Interviewee A responded it in a positive way:

Yes, it should be helpful. You will feel more confident to treat these students. Through the course, you will know how to give assistance to these students in need and you would know the specific procedures involved in this process. (June 3, 2013)

Interviewee B expressed his concern about the application of Canadian online Special Education into a Chinese context, as he mentioned this process should integrate all the parties involved, especially the students:

I think first it is not one person's job; you need to work with a group of people including government agencies, universities, instructors and scholars, school administrators and teachers. I really want you to consider involving students; in the West, Canada, in Ontario, they always involve students in decision making. It

is a democratic practice, for example, inviting students to a council or board to have their voice. (June 8, 2013)

However, in a country with a large population like China, it is very difficult to coordinate every party. There is a huge number of students, and the teachers needed to be trained, making this process more complicated.

In the meantime, cultural issues may also influence the introduction of online courses. Zhao and McDougall's (2008) study titled "Culture Influences on Chinese Students' Asynchronous Online Learning in a Canadian University" revealed several cultural facts which could influence Chinese students' online learning quality, including: "ignorance of western social life," "Chinese cultural personality," "attitudes towards presenting opinions in public," "high achievement motivation," and "instructor's authoritative image" (pp. 71-73). Therefore, certain Chinese cultural practices may also become a barrier of successful introduction of Canadian online course. For example, the Chinese conventional personality may diminish the effects of online learning due to students' reluctance to participate: "The participants' typically conservative, modest, face-saving Chinese personality reduced their participation in online discussions" (Zhao & McDougall, 2008, p.72).

Nevertheless, some interviewees also expressed their positive opinions about the application of this online approach in a country with a large population:

The good thing is you can type it anytime, in classroom, only one person can talk.

Online is a group activity, open discussion. In face-to-face classroom, only one

student can talk, time is very limited, in online courses, anyone can talk simultaneously. (June 8, 2013)

Question 11 asked participants if they thought the use of the Ontario-based model would be effective in other parts of the world. Results show that 66.7% of the participants chose a negative answer, while 22.2% chose the neutral option, which questions the viability of the Ontario-based online Special Education teacher training approach elsewhere in the world. Some of the interviewees also insist that it is necessary to make some kinds of modifications to the Canadian online Special Education teachers' courses. Interviewee A said,

I do believe this approach can be applicable in China. There is already the conception of Special Education in Chinese educational system, if we introduce the course of Canadian style into this system with the current situation, that should be fine. (June 3, 2013)

Meanwhile, Interviewee B discussed some of the challenges this process of introduction may encounter:

Maybe the challenges we may encounter would be that people question about this, they think that's from overseas so that it may not fit into the Chinese context, which is very common. For people who are open-minded, they would see the strengths of the ideas, programs, and curriculum from Canada. That could be adopted, ideas could be adopted in our teachers' preparation program. (June 8, 2013)

In Ontario, Canada, every school has a designated Special Education teacher, which influences the promotion of online Special Education. Interviewee C thought it would be an essential part of introducing Canadian Special Education courses into a Chinese context:

I suppose I would say, you need to have teachers are designated as special education teacher, assigned to every school, as support as classroom teachers, and to be a person between teachers and principals, teachers and parents and students, and that person will provide on-site service after school and that would also support the online courses. (June 11, 2013)

The Need to Modify Canadian Online Special Education Courses

Question 12 examined whether the Canadian online Special Education teachers preparation courses need to be dramatically transformed in order to serve as a model in developing countries like China and India. The majority (72.2%) of participants agree with this opinion. Interviewee B elaborated on the topic:

For instance, the programs usually involve Western society and changing attitudes or understanding for students with disabilities, China may not have a similar or seeming history, they may have difficulty to understand certain issues, and also human rights, the value system, may be different. I wouldn't say which tradition is better than the other, but they are different tradition. (June 8, 2013)

Table 12

Results of Survey Question 12: Canada's Online Special Education Courses Will Have to Be Significantly Modified for Use in Developing Countries Such as China or India (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=1 (5.6%)	N=3 (16.6%)	N=9 (50.0%)	N=4 (22.2%)

Table 13

Results of Survey Question 13: Canada's Online Special Education Courses Can Be Translated Into Languages Used Developing Countries Such as China and India (N=18)

Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
N=1 (5.6%)	N=6 (33.3%)	N=7 (38.8%)	N=3 (16.7%)	N=1 (5.6%)

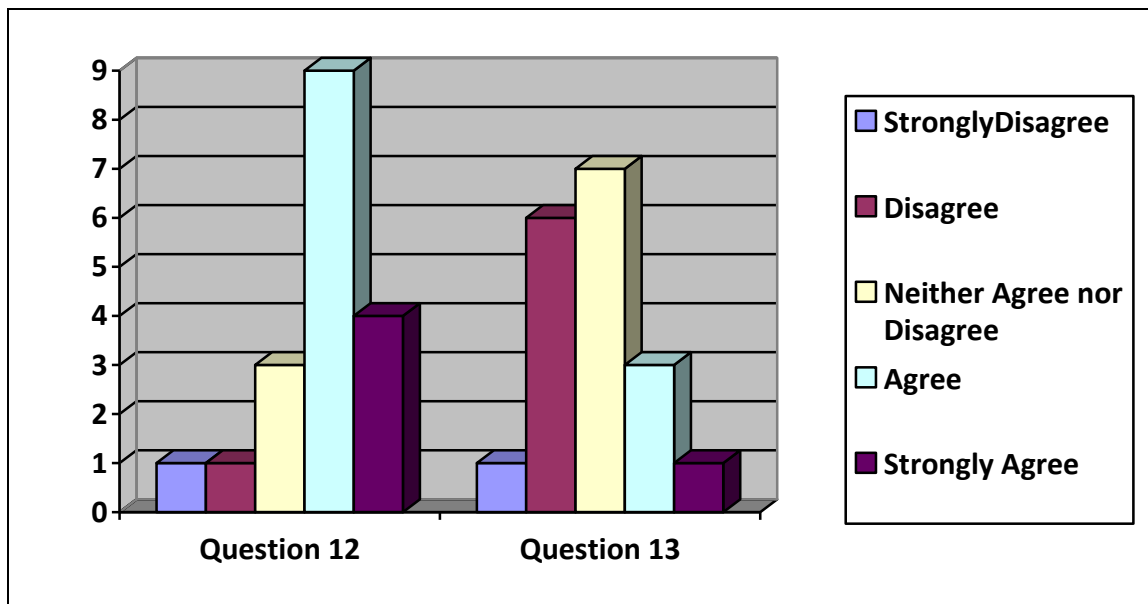


Figure 6. Comparison of questions 12 and 13.

Apart from the content modification, Interviewee C, as a Special Education specialist, believes that the Ontario-based Special Education approach should be promoted in a slow and steady way:

I suppose teacher education has to be a key, there is a saying, start small but think big, and I think if I was involved in the Chinese educational system, I would have a long-term goal and think big what we want to be, but don't overwhelm people, start small, move slowly and integrate students into schools and spend money, provide professional development for teachers, so they are not afraid to get special needs' kids into their classrooms, and they do get them to get their learning meaningful. So I guess teachers' education is a key and principle in education. (June 11, 2013).

Actually, not only should the process of introducing the concept of Special Education into the Chinese context be taken step by step, but also the process of modification should be kept slow because it may encounter a dramatic change according to contextual differences.

The reality is that there is a big difference in social backgrounds between the two countries, so the Canadian courses may be dramatically modified when introduced into the Chinese context. Interviewee D discussed her experiences in regard to this difference:

We should first see what other people do in Canada, and figure out the differences between two countries, which point is useful and which part we cannot use. To be honest, I do think the approaches of which China makes use are not practical in

Canada, because the conceptions of special education between the two countries are different. A very simple example can be presented to show this dramatic difference. In China, for example, some students shouted in the classroom and have destructive influence on other students; maybe the teachers will ask the students to stand up as a punishment and the teachers won't get any trouble because of this. In Canada, basically, we have a special room to let them calm down and this is a scientific method....And also, in China, there are less expertise people with the professional knowledge in this field, in Canada, teachers deal with these kinds of issue professionally. (June 16, 2013)

Question 13 asked participants if they thought the course language of the Ontario-based model from English into another local language in another country, such as Mandarin in China. The results show that 38.9% of participants disagree, 38.8% hold a neutral perspective, and only 22.3% agree with the statement. Obviously, mere change of language is inadequate; more factors should be considered and modified in order to be accepted by people from another culture. Liu (2007) suggest that "in order to design an effective curriculum that can be applied in a cross-cultural learning environment; both instructors and students need to be aware of diverse cultural value systems and their characteristics" (p. 35). For example, Asian and Western students have different learning habits, and Liu notes that "in online learning interactions, Asian students tend to rely heavily on the posted instructions, while Western students tend to be peer-oriented learners" (p. 42). Also, from my own course observations, federal and provincial

regulations concerning Special Education impose mandatory content and it is unclear if all such content may be applicable to Chinese schools. Thus, the problem of balancing different cultural characteristics by means of changing only the language and transplanting the whole Western culture-based courses merits further investigation, which will be discussed in the following chapter.

Observation of Canadian Online Special Education Teacher-Preparation Courses

This study sought to examine the efficacy of introducing Canadian online Special Education teacher-training programs into a Chinese context, so analyzing the courses themselves is a crucial step. It is important to understand the basic structures, contents, styles of communication, feedback from teachers, and evaluation of study, and to observe how these sub-systems operate with each other in order to identify which parts can be used in the Chinese context. Fortunately, I received access permission to access an Ontario university's Special Education online teachers' education course, so I was able to observe how it works authentically. In this section, I provide an overview of this course based on my observations.

Technology Support from the University

This course is an AQ course designed and operated by a continuing education centre in an Ontario university which provides an online platform of learning (Platform A). Platform A is community-based and uses a Learning Management System (LMS)

software application called SAKAI¹(Brock University, 2013e), a “vibrant community creating technology that enhances teaching, learning and research” (Sakai Project, n.d.). University students and faculty can access the platform for academic learning on-campus anytime, and can also log into the system anytime and anywhere off-campus with their usernames and password. The main components of Platform A include: Announcements, Assignments, Assignments 2 (which integrates with the website <https://Turnitin.com>), Forums, Gradebook, Resources, Schedule, and Test and Quizzes. There are also some other parts including Chat Room, Drop Box, Home, Messages, News, Podcasts, Statistics, Web Content, and Wiki (Brock University, 2013c). The detailed description is as follows:

Announcement. On this platform, the announcement part would give the readers the latest messages from instructors; the announcement could have multiple attached files or links. Also, the instructors can choose the setting that the announcements will be automatically sent into the mail-boxes of all participants (Brock University, 2012c). See Figure 7.

Assignment. This component allows instructors to set up, gather, mark, and give out the online assignment. In this part, the whole information will be confidential and only the student and his or her instructor have access to it (Brock University, 2013a). See Figure 8.

¹ See <http://www.sakaiproject.org>

Recent Announcements

Announcements (viewing announcements from the last 10 days)

There are currently no announcements at this location.

Figure 7. Example of Announcements component.

Source: Brock University (2010a).

Assignments

Assignment List

Select an assignment to view details, start working or edit your previous work.

Assignment title	For	Status	Open	Due
Individual Assignment	site	Not Started	May 13, 2013 11:00 pm	May 24, 2013 11:00 pm
Response paper - Case	site	Not Started	May 13, 2013 12:00 pm	May 28, 2013 11:00 pm
Response Paper -- Case	site	Not Started	May 13, 2013 12:00 pm	Jun 3, 2013 11:00 pm
Response paper --- Case	site	Not Started	May 13, 2013 12:00 pm	Jun 7, 2013 11:00 pm
Response paper --- Case	site	Not Started	May 13, 2013 12:00 pm	Jun 12, 2013 11:00 pm
Response paper --- Case	site	Not Started	May 13, 2013 12:00 pm	Jun 17, 2013 11:00 pm
Final Quiz	site	Not Started	Jun 14, 2013 8:00 am	Jun 21, 2013 11:00 pm
Major Team Assignment	site	Not Started	Jun 22, 2013 11:00 am	Jun 28, 2013 11:00 pm

Figure 8. Example of Assignments component.

Source: Brock University (2010a).

Assignment 2. Assignment 2 is the next-generation assignment tool. It has various improvements including an enhanced web user interface and the integration with Gradebook. The most significant feature of Platform A's Assignment 2 is its link to plagiarism-based website Turnitin.com (Brock University, 2013b). See Figure 9.

Forum. Forum is a tool for the interactive and spontaneous communications between instructors and students in regards to academic topics or students' group work. The participants can open and close forums as needed, and instructors can observe the extent of participation among students (Brock University, 2013f). See Figure 10.

Gradebook. This is an application for instructors giving scores to students privately; students could review their scores (Brock University, 2013g). See Figure 11.

Resources. The Resources component is the most used feature in Platform A; it distributes all the course-related and useful resources to students from instructors. The resources include different types of documents including PDF files, documents, web links, etc. In Resources, the participants also are allowed to upload or download files at once, and accessibility is a vital factor which is taken into account under this platform (Brock University, 2012d). See Figure 12.

Schedule. Schedule is a useful tool that can be used as a daily, weekly, and monthly calendar. Instructors and students alike can post important events in the calendar (Brock University, 2011c). See Figure 13.

[Assignment List](#) ▶ [Add Assignment](#)


Add Assignment

Complete the form and then click Save. An * designates a required field.

Assignment Details

* Title

Instructions



Format Font Size

Supporting Materials [Add](#)

No supporting materials have been added

☐ Add Model Answer?

Submission Details

☒ Require Submissions?

Submission Format

Text and Attachments

Number of Submissions

1

☒ Require honor pledge?

Availability Details

* Open Date

1/3/12

3:32 PM

☐ Post Open Date to

Announcements on Open Date

☐ Set Due Date?

1/10/12

5:00 PM

☐ Set Accept Until Date?

1/10/12

5:00 PM

Grading Details

☒ This assignment is not graded

☐ This assignment is graded and is associated with a Gradebook item:

Select a Gradebook Item

-or- [Create a new Gradebook Item](#)

Submission Notifications

☐ Send email notifications for student submissions

Turnitin

☒ Use Turnitin. Turnitin supports attachments only. Reports will not be generated for text-only submissions.

Submit papers to the following repository:

☒ None

☐ Standard Paper Repository

Generate originality reports:

☒ Immediately

☐ On Due Date [No due date has been set](#)

☒ Allow students to see originality reports

Check originality against:

☒ Turnitin paper repository

☒ Current and archived internet

☒ Periodicals, journals, and publications

Notice

Students will not receive an indication that Turnitin is in use. This should be explained in the assignment instructions.

Figure 9. Example of Assignment 2.

Source: Brock University (2012a).

Forums ?

[New Forum](#) | [Organize](#) | [Template Settings](#) | [Statistics](#) | [Watch](#)

Forums

Group Work [New Topic](#) | [Forum Settings](#) | [Delete](#)

- [Group 3](#) (0 messages - 0 unread) [Topic Settings](#) | [Delete](#)
- [Group 1](#) (3 messages - 0 unread) [Topic Settings](#) | [Delete](#)
- [Group 2](#) (0 messages - 0 unread) [Topic Settings](#) | [Delete](#)

Journals [New Topic](#) | [Forum Settings](#) | [Delete](#)

- [Week 1](#) (12 messages - 0 unread) [Topic Settings](#) | [Delete](#)
- [Week 2](#) (0 messages - 0 unread) [Topic Settings](#) | [Delete](#)
- [Week 3](#) (0 messages - 0 unread) [Topic Settings](#) | [Delete](#)

Figure 10. Example of Forum component.

Source: Brock University (2010b).

Home

Course Outline

Schedule

Announcements

Resources

Assignments

Tests & Quizzes

Gradebook

Course Grade

C (60.69%)

Gradebook Items

Title	Due Date	Grade*	Weight
▼ Final Project		0%	25%
Final Project	Dec 16, 2010	0/100	
▼ Flash Assignment		90%	15%
Flash Assignment	Nov 23, 2010	17/19	
Flash Paper Prototype	-	1/1	

Figure 11. Example of Gradebook component

Source: Brock University (2011a).

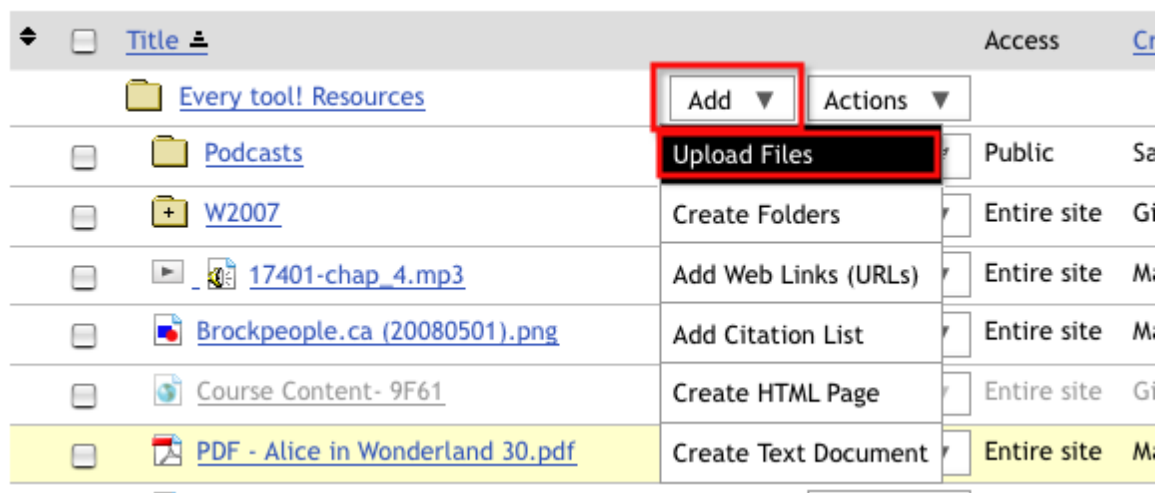


Figure 12. Example of Resource component.

Source: Brock University (2008d).

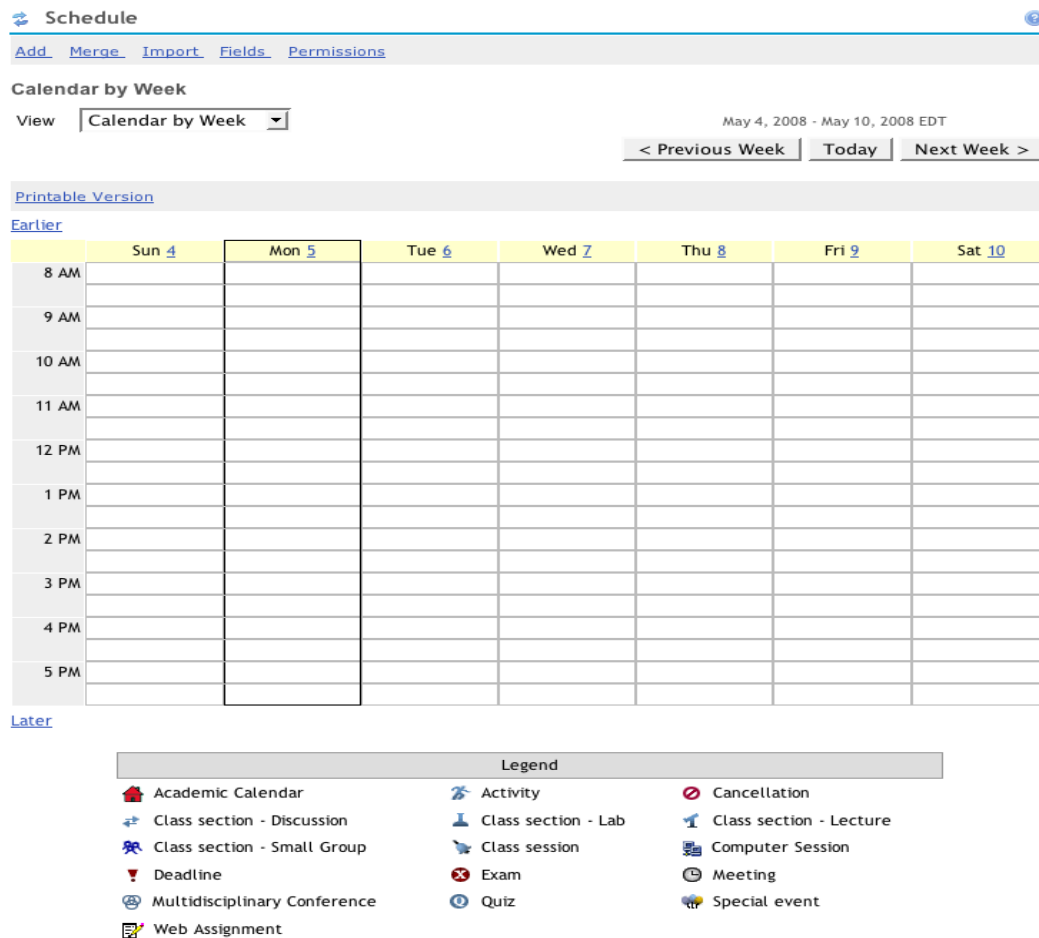


Figure 13. Example of Schedule component.

Source: Brock University (2008c).

Test and quizzes. The Test and quizzes section offers a great academic place for instructors to create quizzes and tests online. In this section, the instructor could set time limits, locations via IP range control, or even set allowance of late submissions. In the meantime, it can also be used as a tool to conduct a questionnaire and survey on certain topic (Brock University, 2013h).

Chat Room. Chat room is a place where the participants in the course could have a free and real-time conversation with each other. Instructors' office hours could also be offered virtually via this tool (Brock University, 2011b). See Figure 14.

Drop Box. Drop Box is a small tool for students to share documents with instructors privately (Brock University, 2013d). See Figure 15.

Home. Home page contains several most frequently used features, including latest announcements, messages, forums, and chat (Brock University, 2010f). The home page shown in Figure 18 corresponds to online Special Education (Brock University, 2010a).

Messages. Messages is a communication channel for all site members to exchange messages (Brock University, 2010d). See Figure 16.

News. News is a feature where the courses are allowed to post a RSS feed so students could receive the latest and updated news on time (Brock University, 2010c).

Podcasts. Podcasts is a tool for all the site users to stream audio-visual materials, and they do not require an iPod or other media devices to stream the multi-media materials on this platform (Brock University, 2010e).

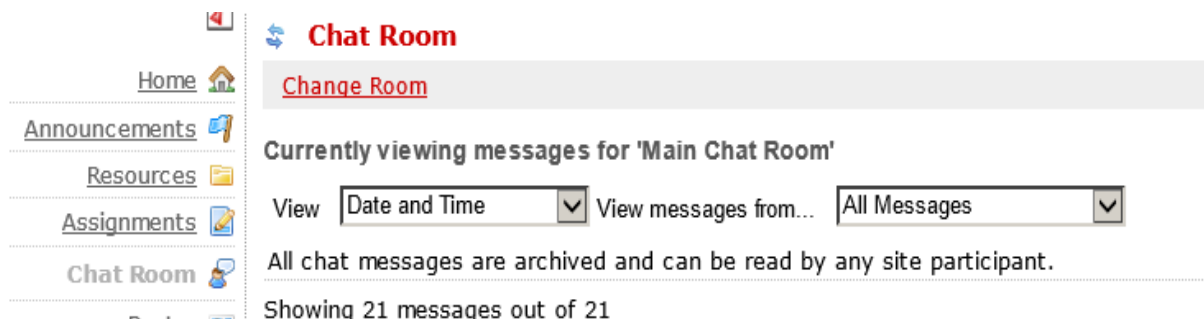


Figure 14. Example of Chat Room component.

Source: Brock University (2010a).

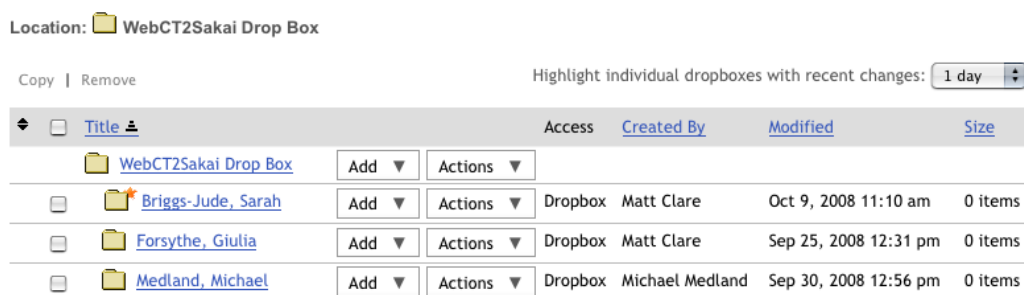


Figure 15. Example of Drop Box component.

Source: Brock University (2008a).

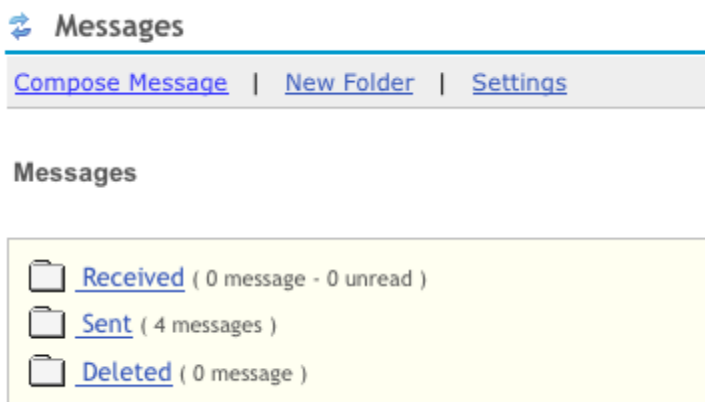


Figure 16. Example of Messages component.

Source: Brock University (2008b).

Statistics. The Statistics enable instructors to acknowledge the statistics information about the usage of the sites, such as the number of visitors, the contributions each visitor made, etc. (Brock University, 2012e). See Figure 17.

Web content. Web content is a tool for site owners to show the website pages to the readers. The title of web content can be changed. This is very convenient for learners to access primary-source documents. Nowadays, legal documents are often published online and thus instructors can bring them to the attention of students, including those in China (Brock University, 2011d).

Wiki. Wiki is a public place created for a particular subject and every participant who has been offered the permission to join can write and/or edit the posted articles (Brock University, 2013i).

All of the components listed above are provided by the university to offer a platform which the online course administrators and teachers could make use of during a course, including online Special Education teacher preparation courses.

Major Components of Online Special Education Teacher-Preparation Courses

Based on the platform mentioned above, Special Education teachers' AQ courses could be realized and conveyed to students online. Instructors and students need a valid user name and password to log into this learning platform and the relevant courses are listed at the top of home page. In the Special Education course which I have observed, there are several sections which are remarkable and merit further discussion.

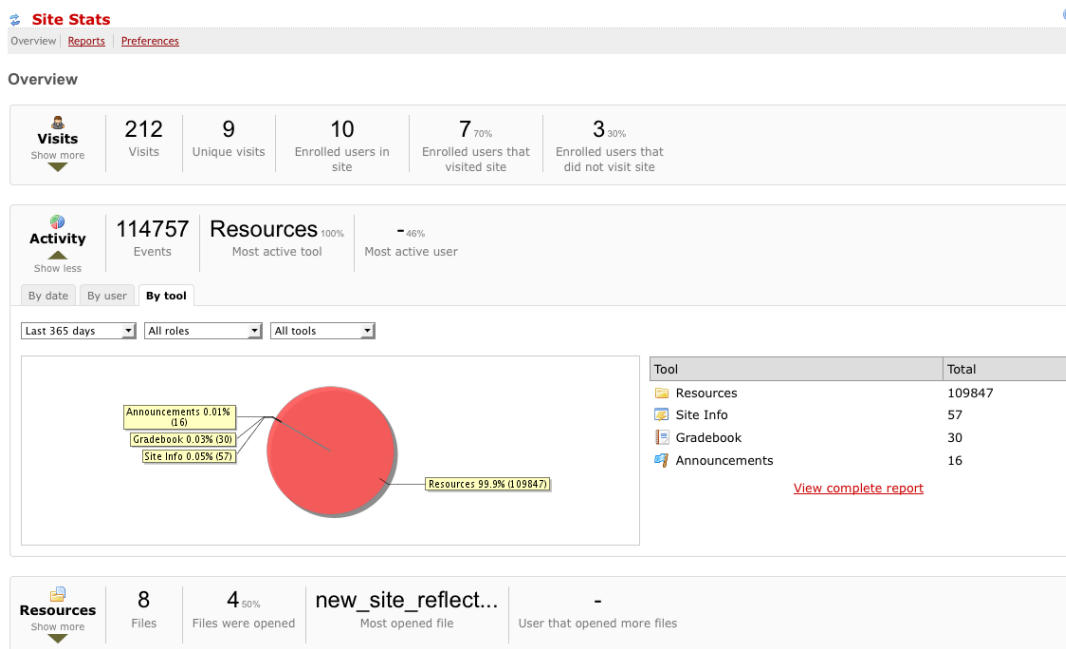


Figure 17. Example of Statistics component.

Source: Brock University (2012b).

General course information and technological support. This is the first interface when people log into the course which is also the course's home page. In this part, several things are listed: the course name, ways to seek technical support, an accessibility statement, a statement on students' rights and responsibilities, a privacy and copyright notice, and a feature called Netiquette (Brock University, 2010a). Netiquette discusses appropriate ways to convey opinions on cyber space: "Netiquette is the term used to describe rules of courtesy in using electronic communication" (Brock University, 2010a). For example, "Don't share confidential information. If you are quoting from something another person has sent you personally, ask their permission first" (Brock University, 2010a). The Home Page may also include announcements from instructors and messages from chat rooms and forums. The image of a Home Page shown in Figure 18 illustrates the main sections which students could use (located at left side of the image).

The function of announcements. The announcements is a feature that allows instructors to announce useful information to students registered in the course. I observed several kinds of information in this AQ course, including the instructors welcoming announcement. These words gave students a first impression of the course instructor, including the past and current educational and employment experiences of the instructor, and even some family information about the instructor. Other announcements pertained to students' assignments, whereby the instructor could inform students of how he or she feels about the assignments just marked. For example, "over-all I was extremely pleased

with the papers...very well researched and thought out” (Hill, 2013). Instructors could also courteously remind students of due dates and consequences of late submissions. The announcements may also include inspiring stories about education, which the instructor may include for a more comprehensive education. Finally, the announcements may also provide information on the opening and closing times of online forums in which students could express their views on course-related material, or even on the course itself.


Course contents/resources. This feature allows the instructors to students all pertinent course information, including course description, evaluation criteria, the summative points of the textbook, Special Education cases, relevant web pages of the Ministry of Education, OCT, and local school boards, course auxiliary documents, and additional resources such as the Education Act and Regulations of the Special Education Advisory Committee. See Figure 20.

The assignments component. Using this feature, the instructor can remind students of assignments they need to submit, including assignment title, due date, status, grade scale, etc. See Figure 21.

Chat room. This feature allows instructors and students to communicate freely. From my observations, chat rooms encompass a wide range of topics that make the learning process more vivid and resourceful. Some users may share useful links pertaining to course assignments, etc. For example, a particular student shared a web page from *The Globe and Mail* to all of the other students since it was relevant to the topic being discussed during the course.

Home

SPECIAL EDUCATION I
Evaluation of course, content, facilitator and learning environment



Attn: Students

Please fill out the end-of-term summative course evaluation

To begin your course, go to Resources and click on Modules.html. The course ends March 8th. Expect 125 hours of work both online and offline.

Electronic Support

Recent Announcements

Announcements (viewing announcements from the last 10 days)
There are currently no announcements at this location.

Recent Chat Messages

Message Center Notifications

New Messages	none
New in Forums	4465

Figure 18. Example of Home Page.

Source: Brock University (2010a).

My Workspace

Home

Announcements

Resources

Assignments

Chat Room

Roster

Site Info

Forums

Messages

Help

Figure 19. Menu of online Special Education course.

Source: Brock University (2010a).

Resources
Assignments
Chat Room
Roster
Site Info
Forums
Messages
Help

Copy

☐
Title

Web Links

☐
Ministry of Education Ontario

☐
Ontario College of Teachers

☐
School Board

☐
Syndromes

☐
Uncategorized Links

Figure 20. Web links provided by the Resources.

Source: Brock University (2010a).

Assignments

Title
Due
Status
Grade Scale

Final Quiz
Jun 21, 2013 11:00 pm
In progress
Points (max 10.0)

Instructions
see details in forum 20.1 and 20.2

Submission
No attachments yet

Figure 21. Information pertaining to the Assignments feature.

Source: Brock University (2010a).

The forum. The online forum is a powerful tool that instructors may use to teach students and to hear feedback from them. Meanwhile, the students can create several discussion groups for to focus on particular topics or case studies. In this forum, all participants can share their opinions on a variety of topics corresponding to Special Education, such as dealing with students with language difficulties or learning disabilities. Figure 22 shows a sample of several discussion “rooms” for some topics. More interestingly, the students could also submit their text-based presentation to the forum in order to fulfill the study requirements.

All of the aforementioned features above correspond to the substantial components of the Special Education teacher-training AQ courses I observed. Overall, it provided us an exciting, stimulating, and valuable experience regarding new Special Education teachers’ preparation approaches, although some parts or content may need to be improved or modified in order to introduce such an approach into a new (i.e., Chinese) context. The next chapter discusses the significance of the study’s findings, its implications, as well as conclusions regarding the potential introduction of Canadian online Special Education teacher-preparation courses into the Chinese context.

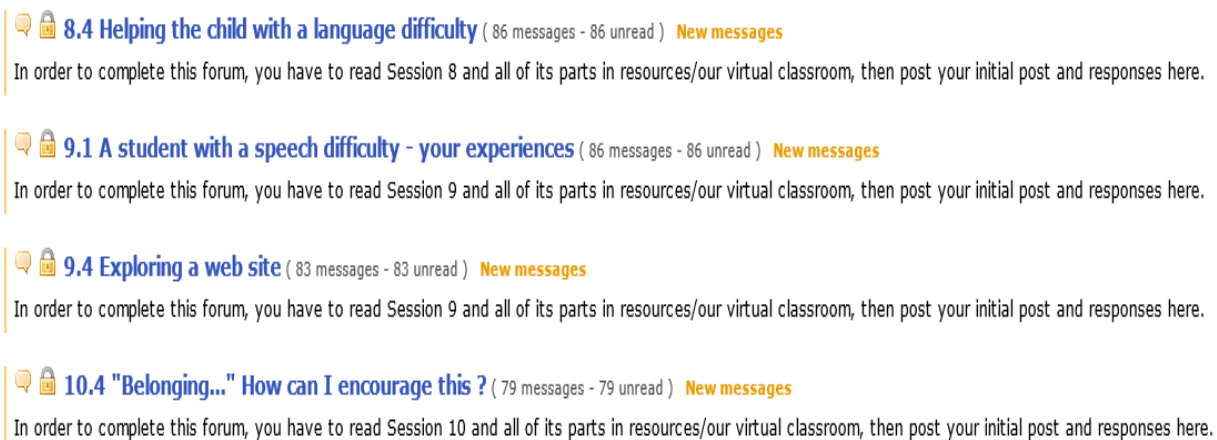


Figure 22. Several discussion topics in the forums.

Source: Brock University (2010a).

CHAPTER FIVE: FINDINGS, IMPLICATIONS, AND CONCLUSION

This study examined the efficacy of using an Ontario-developed online Special Education teacher training course as a model for teacher professional development in Special Education in China. It explored the potential benefits and problems associated with applying a Western model of online teachers' professional development in Special Education into China's teacher training system by gathering the perceptions of a group of classroom teachers, educational administrators, and teacher-educators familiar with online education generally and more specifically with the education and teacher preparation systems of Canada and China. Questionnaires and interviews were used to gather participants' perceptions and opinions on how well an Ontario-online education course in Special Education designed for Ontario teachers as an in-service professional development vehicle might work in China.

Informed by a review of the relevant research literature on online education and teacher professional development, as well as a careful consideration of the design and delivery system of an online Special Education course currently offered to Ontario teachers, a series of questions was developed and put into a questionnaire that was given to eighteen Chinese classroom teachers, two teacher-educators with educational experience in China, and two graduates of Special Education programs in China and Ontario. The questionnaire and a series of interviews conducted with a subset of the participant group which had the most experience in the subject areas were used to gather data about participants' views on the viability or efficacy of using an Ontario developed

online Special Education course for teachers in China to help prepare Chinese teachers for working with students with special needs or exceptionalities in the regular classroom. Some of the data collected from these sources were discussed in the previous chapter which presented the results of the survey data collection, and this section will discuss the principle themes that emerged from the survey data analysis and interviews in greater detail.

Three principle themes emerged from the data analysis. The first theme is a general lack of understanding of what Special and Inclusive Education is or how it might be applied in the Chinese education system. A second theme emerged regarding online education generally and more specifically the topic of how online education might be applied in teacher training in China. Generally, study participants felt that online education is a good resource for learners and an economical and convenient method for teaching and learning but they expressed concerns about how ready China's teachers and students might be for such an innovation. The third theme that emerged was a perception that while Ontario-developed online curriculum could be valuable as a model for use in other jurisdictions, the model would need considerable in-situ tailoring or modification especially in terms of input from local stakeholders if the Ontario-style online courses are to be accepted and effective in changing teacher practice and attitudes towards Special and Inclusive Education.

With regard to the first theme, the findings from the questionnaires and the interviews show that the majority of participants felt that they—and by extension the

majority of teachers and the general population of China—did not have a good understanding of what Special and Inclusive Education is or how it should be applied in regular schools. Expanding on this theme, the majority of participants felt that in China Special and Inclusive Education is underappreciated and undersubscribed to in terms of teacher professional development or as part of general teacher in-service education for a variety of reasons, from practical concerns about a lack of diagnostic and support services in schools and communities, to more theoretical or philosophical concerns such as a lingering belief in segregation and separate schools for children with exceptionalities caused in part, as one interviewee suspected, by the high level of unfamiliarity and lack of interaction with Special Needs students and their issues and needs in Chinese society.

With regard to online education, the dominant theme that emerged in the interviews and in the questionnaire was the sense that while online education is theoretically a benefit for learners in terms of convenience, cost savings, and flexible access, the majority of participants expressed concern about how well an Ontario online system would fit into the education system and needs of Chinese teachers and learners, given for example that many Chinese learners might still be struggling with keyboarding and understanding how to work in an online environment which is very different from the traditional face-to-face education experiences of most students and teachers in China. An interesting recommendation that arose from the discussion of this theme was that the most effective format for introducing Special and Inclusive Education to regular classroom teachers in China might be a combined or blended Special Education course

approach which is partially online and partially face-to-face. Survey results suggest that many of the participants agreed that an Ontario-developed online Special Education course for teachers might not be suitable for use in China without major adaptation beyond simple translation from English to Mandarin. Participants expressed concern that local information and input from the communities, parents, and students would be important if teachers are to be asked to work with students with exceptionalities in their classrooms. The participants were unsure how well an Ontario online course model would work in China without involving Chinese teachers and community representatives in the process. Most participants felt however that as a curricular model or base from which to develop more explicitly tailored Special Education courses for use in other jurisdictions including China, an Ontario online Special Education course which reflects Western understanding and research into Special and Inclusive Education would be valuable and worthwhile. In the following sections the three emergent themes will be discussed with reference to the research literature and findings from the interviews and questionnaires.

Theme 1: Understanding of Special and Inclusive Education

A general finding from the survey and interview results for this study is that participants felt that China's general population, including regular classroom teachers, does not have the same level of understanding or acceptance of Special and Inclusive Education as Canada's general populace and regular classroom teachers, Which is aligned with Liu' argument (as cited in Deng, Poon-Mcbrayer & Farnsworth, 2001).

Moreover, interview statements reveal that the participants also felt that the Chinese community generally did not have the same level of acceptance for people with exceptionalities (Campbell, 2010; Peng, 2011) and considered Special Education as referring only to students with special handicap needs and not gifted or creative education. Two of the interview participants suggested that China's general population does not display the same level of respect or understanding of Special Needs students as Canadians and they speculated that perhaps this was the result of the lack of education about Special Needs and Inclusive Education in China, although they also suggested that this is changing as Chinese society becomes more open and more is learned about Special Education from learners like themselves who have had foreign schooling experience. Interviewee B stated that,

In China, we still do not have that same level of respect for the general population who suffer from disabilities and even for children who suffer from different disabilities, as I have seen in this country, although we do have awareness and understanding and we do provide financial support for special needs in separate schools. (June 8, 2013)

The same opinion was also shared by Interviewee D who mentioned the conscious obstacle of teachers' professional training: "some Chinese people recently, in some people's eyes, why should we take care of them? Why should we spend so much money on them? That is a waste of money!" (June 16, 2013).

Although it is an extreme case of this situation, Interviewee D expanded on the

idea of change happening in how teachers and the populace in China look on Special Education, stating that China's new economic prosperity was creating a positive attitude to social issues including enhancing people's attitudes to and awareness of special and inclusive education. Li and Altman once stated the economic and political transformation is one of the significant influential factors for Chinese special education development (as cited in Ellsworth & Zhang, 2007). Interviewee D stated that,

When your economy has been improved, your spiritual life will also be changed. In China, it is really an opportunity because people really lack this awareness of special needs and special education but now that they are not lacking money they can afford to help. It is really socially meaningful. If all the teachers receive education like this on special needs and special education they will not discriminate those people and the people with special needs will benefit and then teachers will influence their students not to discriminate and accordingly, the quality of the next generation of Chinese teachers will be improved. (June 16, 2013)

Apart from the awkward situation of Special Education recognition, Interviewee D noted that the general definition of Special Education in China is narrower, as shown both in the literature and research data (e.g., Deng, Poon-McBrayer, & Farnsworth, 2001; Kritzer, 2011; Xie, Chen, Xia, & Tan, 2013). It does not recognize giftedness or learning impairments as part of Special Education, and by focusing instead on high levels of physical disability there is less understanding of the benefits for regular classroom

teachers of learning more about Special and Inclusive Education strategies and techniques. Interviewee D who studied Special Education in both China and Canada stated that,

In China, the conception of special education is very narrow, and in Canada, the definition of special education is broader...it would be very good for regular teachers in China to come to see and learn about how special education as it is practiced in schools ...if it could be introduced into the Chinese context of special education, along with some modifications based on Chinese society, that would be really good for students and for China. (June 16, 2013)

Theme 2: Online Education and Teacher Preparation

The literature review shows that both pre-service and in-service training for regular teachers on special education play a vital role in inclusive education (Deng & Harris, 2008; Deng & Manset, 2000; Deng & Poon-McBrayer, 2004; Feng, 2010; Law, 2011; Peng, 2011; Sharma, Forlin, Deppeler, & Yang, 2013; Wang & Xiao, 2012). From this study, all of the interviewees agree that regular teachers should be trained in special education. Interviewee B commented that,

Teachers everywhere should be trained in special education. That is definitely needed no matter in which country and which province or which program, because students with special needs require different knowledge about teaching...Pre-service teachers do need learn from experts to be ready to teach special needs' children...they can't do it on their own without training and

support for special education. (June 8, 2013)

This study's data analysis revealed that some participants do not think it is necessary for regular teachers to get trained in Special Education perhaps due to underestimation and unfamiliarity of Special Education. Interviewee B said that this lack of respect or lack of experience with and information about people with exceptionalities could be a disadvantage or barrier to the introduction of an Ontario-style online course for Special Education because the course would have to overcome the existing prejudices or attitudes that exist in the community. Some studies also indicate that Chinese teachers in LRC (Learning in regular classroom, Chinese inclusion education) programs lack expertise (Deng & Harris, 2008; Deng & Menset, 2000; Peng, 2011).

Nonetheless, Interviewee B also commented on the great opportunity for introducing the Canadian model in China:

People who undervalue and are unfamiliar with special education or inclusive education will also undervalue any Special Education teachers' professional development course. By that I mean, they won't think the course is useful and valuable to be used in China. That will also discourage people to accept this course. On the other hand such an online course is also an opportunity for us to introduce more information about Special and Inclusive Education practices into China... because the Chinese economy is booming and people's awareness will change with the economy...so at this moment, Ontario-style online courses could provide a choice for people if the courses were more available and affordable

than other ways of learning about Special Education. (June 8, 2013)

Interviewee D noted that in Ontario, one of the driving forces for consistent Special Education teacher training is that the government through the Ministry of Education and the OCT has created a specific set of policies and practices for Special Education that must be followed by teachers. The case is not the same in China where policies for Special Education are less clear cut and detailed and more subject to local interpretation. In spite of the legislation in China that corresponds to Special Education—the Constitution of China (1982); the Law on the Protection of the Disabled Persons (1990, revised in 2008); Education Law of the People's Republic of China (1995); and Outline of the National Medium-and Long-Term Program for Educational Reform and Development (2010-2020); as well as some local policies that state the importance of Special Education and its teachers' training—some problems still exist (Kritzer, 2011; Peng, 2011; Wang & Xiao, 2011; Xie et al., 2013).

Interview D said,

In Canada, the policies on special education are created in a very detailed way.

Whether you want or you do not want to, you must do your work as the policies describe. In China, our policies are not very detailed, and teachers do their jobs according to their own personalities. If a child meets a bad teacher, that will be a disaster. Here, there are very detailed policies that you will have to follow in how to deal with that problem student or teacher and you have to follow them regardless of what you really think in your mind. In China, the teachers'

behaviours code is too general, covering only one page of the teachers' manual, but in Ontario there are 64 pages of teachers' behaviour regulations that all teachers are subject to. (June 16, 2013)

Interviewee B, a China-trained teacher, also said,

I have visited some special schools here in Ontario and we in China still have a long way to go including the development of laws for protection and support for people with special needs. In the west, there was a big movement in the past, some 50 years ago I think where they established a comprehensive law system and educational system for dealing with Special and Inclusive Education...that is still developing in China. (June 8, 2013)

Some literature supported this idea by saying that training Special Education teachers has not been part of the national teacher-training system although Special Education has been recognized as a significant component of the whole educational system in many policy documents (Deng & Harris, 2008).

In this next section, participants' ideas and perceptions of why teachers in China engage in professional development or in-service learning are presented and discussed in terms of how these motivations might impact teachers' willingness to take an online course in Special Education.

The literature on teacher professional development and motivation for in-service learning is extensive. Feng, (2010); Kao, Wu, and Tsai (2011), and Wang and Xiao (2012) all agree that there are a variety of psychological issues involved in motivating teachers to

participate in professional development, including online training courses. One of the primary professional development drivers for teachers is associated with why someone decides to become a teacher (Feng, 2010; Kao et al., 2011; Wang & Xiao, 2012). In other words why someone wants to be a teacher correlates positively with whether or not they participate in professional development learning. The interview results in this study indicated that the research literature's findings seem to hold true for teachers across nationalities or jurisdictions including China. Study participants who were teachers or were studying education stated that their primary motivations for in-service learning or professional development included enjoying working with children, seeing the teaching profession as a way to make a positive change in the lives of children, and achieving a sense of fulfillment and self-validation from their working with students. Interviewee A summed up this sentiment succinctly stating that,

I wanted to be a teacher from childhood, and I knew I wanted to work with kids. I think that if I can do something useful to help children or prepare them for life, I would feel very happy. Anyway, I like to work with children. (June 3, 2013)

Interviewee B agreed with the sentiment and expanded on it by stating that,

Working with students is rewarding, challenging, fascinating and I like children ...I guess what motivates most teachers is seeing the changes they could make for future generations. There are a lot of people who become teachers and want to learn how to be better teachers by taking on professional development in order to help change lives or to make a difference in the lives of future generation.

(June 8, 2013).

Interviewee C, who is not a China-trained teacher but a teacher-educator and administrator with experience in China, stated that

From what I have seen in three visits to China, I would say a good teacher is a good teacher, whether in Canada or in China, teachers who are good teachers care about their students, and they do everything they can to help their students to succeed. I think what motivates teachers to undertake professional development is seeking how to encourage success for their students. I know people have said money is a motivating factor but I don't believe it, and I read some research that says money would not motivate people, maybe it's a perk in their lives, but a large salary does not motivate teachers, the most motivated thing is the success of their students, and to get support from administration, whether the principle, school board or the government, in recognizing the work that they do. Good teachers love teaching, they love students, they love to see their students succeed.

(June 11, 2013)

Given that both the research literature and the participants in this study suggest that a primary factor in teachers taking in-service or professional development courses is a desire to help students and to see them succeed, it seems logical to recommend that if an Ontario-developed Special Education course for teachers is to be viable in China, it must be clearly and explicitly targeted to helping Chinese teachers work with students with exceptionalities to help them succeed in class and in life. Moreover, the course

would have to be supported by local school administrators, regional government, and the community in order to help students with exceptionalities attain a better life and future beyond school.

The limited research literature available in the West on Special Education in China suggests that the primary reasons that China's teachers select Special Education as a teaching field other than an intrinsic desire to help students with disabilities based on their own experiences with or knowledge of such students include: it is a family decision and the influence of parents and family on career choices is powerful in Chinese society; it is a last choice based on not having the requisite grades or wherewithal to undertake any other field of study; or it is simply a matter of being recruited to the field and seeing the possibility of a job in what is a difficult employment market.

Feng (2010) reports on a study where 63% of participants who were all teachers at Special Needs schools in China declared that they chose to be Special Needs teachers as a result of "being recruited, or having no choice due to family economic pressure or a government's city dwelling policy, or health, and family concerns" (p. 72). Feng further reports that another 5% of these teachers chose a career in Special Needs education because of parental pressure while 18% of the teachers reported entering the career because they saw a job opportunity. Given these motivations and statistics it would seem that any online Special Education course would not be of interest to these teachers unless there were external rewards or benefits that addressed the financial or employment concerns of the teachers. It is suggested therefore based on the literature and on the

findings from questionnaire and interview data presented here that a combination of approaches combining appeals to teachers' natural desire to want to help their students succeed plus external rewards or career motivations supported by local school administrations and local community stakeholders would be the best means of getting more teachers interested in Special Education as a career option in China but little is said about how to get teachers interested in online Special Education training as an in-service professional development option.

Feng (2010) suggests that the literature for Special Education teacher training in China supports three primary reasons for teachers to undertake in-service Special Education training beyond the intrinsic desire to help students with special needs. First there is the requirement of professional necessity or a need to learn more about Special Education because a teacher is in charge of a Special Education class or group of special needs students and there is a need to learn how to cope with the day-to-day functioning of such a class or group. Second there is the professional benefit reason associated with any additional schooling to a teacher's career or professional advancement. Third, the training may be a mandatory requirement for some teachers in specific areas or fields.

Survey and interview data discussed in chapter 4 suggest that the benefits of taking an online teacher Special Education course might include an improvement of working conditions in classes and schools, and the development of greater cooperation and collaboration with school colleagues in working with special needs students. Deng and Harris (2008) suggested some solutions for Chinese Special Education teachers'

preparation, including the adoption of new teaching approaches. Also, Chinese modified Canadian online Special Education courses could also serve as an essential component of initiating a long-term and systematic in-service teacher-training plan, which is another suggestion in Deng and Harris's article.

Interviewee C, a teacher who has taken Special Education training in both China and Canada, stated that

Professional development or in-service education for teachers in Ontario provides teachers with specialized certificate in any number of subjects or disciplines including Special Education. Teachers interested in Special Education in Ontario can take three parts AQ courses each of approximately 100 hours of training that lead to a Specialist in a subject area such as History, Science, or English as a Second Language for example. I have Special Education qualification as a Specialist, which means that I took three Special Education courses one each over three summers... I found the training very useful and the textbooks we used in training were very good. And when I went back to my school September, when I worked with students with special needs, I found that I often referred to the Special Education books that I had purchased ... and the most valuable thing is that I worked with other special education teachers and we would help each other with problems and support each other as we needed. (June 11, 2013)

Some interviewees expressed the view that while in their opinions the best reason to take professional development or in-service Special Education courses should be an

intrinsic motivation to better understand and be able to work with students with exceptionalities, external forces such as school, professional, or government requirements are also valid drivers for taking these courses. Interviewee D expanded on the idea that change in attitudes towards Special Education is starting in China but added that if online education is to be used for teacher training in Special Education there will need to be more government impetus and involvement in moving teachers and the education sector in China in that direction. Interviewee D stated:

I think mandatory government direction is very important for promoting online teacher special education in China...the government needs to help shape a new perspective on Special and Inclusive Education so teachers will be influenced... if the government is more involved in moving in that direction...teachers are more likely to want to go in that direction. (June 16, 2013)

Interviewee A, who expressed the view that online Special Education courses have significantly helped Ontario's teachers learn about special needs and how to work with students with exceptionalities on a daily basis, concluded,

I have learned about ADHD students and autism and other exceptionalities and conditions. I learned how to recognize and work with these students and understand their behaviours, what kind of resources our schools and community governments have to help teachers, how to create Individual Education Plans and how to work with parents and professionals from the community to help these children learn and make their way in life. Helping students with exceptionalities

takes more than an individual teacher...it involves several parties' evaluation including psychologists, parents, and teachers including Special Education teachers. I learned about all of this and how to work with these teams of people to help students and I did it online. ... The best feature of an online Special Education course is the resource sharing that occurs between and among the participants...everyone helps everyone else and we all learn together how to help our students. (June 3, 2013)

The question of using online education as a means of training China's teachers in Special and Inclusive Education sparked much discussion among interview participants. Interviewee B expressed a common theme suggesting that,

online education is relatively new in China, there are lots of advantages to employing this new technology...it can reach more people, in many ways, more efficient and economical, it can be more effective in reaching teachers and learners in remote areas.... especially for China where there is a big population, lots of students across a vast land... students can access online education easily and it may be a good tool but it may take time. (June 8, 2013)

Asked about the problems that an online Special Education course in China might face, one of the interview participants who had extensive experience in online AQ course programming suggested that online courses are not in and of themselves guarantees that a student will learn and some people can and do cheat in online coursework. Interviewee C stated that

Some teachers in an online course will simply put in the time, rather than putting in any effort. ... Some people will put in many more hours than the 100 hours a typical online special education course consists of but some will just do the minimum and get by. ... Some people think a course will be easier because it is online but there is no easy way to monitor how someone works online... it depends on how well the teacher understands how to work online...so some people can try to cheat or have someone else do the assignments for them, but they are only hurting themselves because they are not learning how to improve their teaching and help their students. ... They are only doing it to get a grade and to show they have taken the course. ... So I don't know how well we can monitor online courses but I feel the majority of teachers are very professional, they would not cheat and they take the course because they want to learn...they take the course because you want to learn how to help their students. (June 11, 2013)

Interviewee C, also arguing in support of online Special Education, listed a number of benefits:

I have confidence in online education and I see great benefits to it and just an hour ago I was encouraging one friend of mine a teacher to take an online Special Education course. ... I see lots of benefits. ... Teachers can work at their own pace, when it is convenient for them. ... The particular woman I was talking to is a young mother with two young boys at home, and I suggested to her that an online course would work for her because she could fit learning into her schedule

rather than having to go to the university at a specific time... because she could work at home. ... Also an online Special Education course would help her with her classes because she would be working online with many different teachers who could help and advise her and she could practice what she learns online in her own classes ...and then she could talk about what she did with the other people in the online course ...it could be a good back and forth of ideas and practical suggestions which is a strong benefit of an online course...not just convenience for the teacher, but since online courses needed to be built with cohorts or groups then the learners all teachers can keep in touch with one another online, talking back and forth, communicating with each other which makes online courses meaningful. (June 11, 2013).

Interviewee C, who has evaluated online Special Education courses for Ontario teachers, said

I had teachers in my school when I was a Principal who have taken special education courses and they took the course because they were looking for specific solutions to specific problems in their classes... because they had students with severe behaviour problems or students who were gifted, or students who were brain damaged, and these are all exceptionalities...these teachers took an online special education course and I evaluated how much they have learned in their online course, and I saw the real benefits reflected in their improved confidence and ability to work with students in the classroom. ... The children in their

classrooms who had special needs were having their needs met because these teachers were using information from the online course and applying it directly the very next morning with the kids in their classroom, I saw the kids' behaviour change, or the learning plan change, because the teachers benefitted immediately from information and help they received in the online course they were taking...teachers could work on the course while they were at school, during lunch or break or whenever they could during the school day ... teachers could go onto a computer, ask questions and peers and the instructor at the University XXX would talk about answers, so they could apply what they learned directly to students in the classroom..... I found that wonderful. (June 11, 2013)

When asked to elaborate on why someone would take an online Special Education course, Interviewee C said

my motivation would be better understanding of all the children in the school and their needs, not just students with exceptionalities...some of the information that you learn in a Special Education class such as Differentiated Instruction and Individualized Education Planning can be applied to any student and help teachers with understanding student needs...so what would motivate me would be to ensure that every child in school would get his or her needs met, and I would get that understanding by taking the course ...and an online course would be convenient for me in my schedule. (June 11, 2013)

Theme 3: Canadian Special Education Teacher In-Service Training Course

An important consideration in using case studies in China based on the Ontario online course model is that translation of jargon would need to be carefully dealt with. Special Education terminology in the two countries may differ or have significantly different meanings or consequences, so it would be necessary and prudent to have a collaborative effort involving experts in both countries working on translation and development of appropriate cases for use in China. Moreover, the cases would need to reflect local community standards and realities; otherwise they would not be of much. Cases for China would need to be developed by and with teachers and professionals in the various regions of China where the online Special Education course would be pilot tested. In a particular case study conducted by Gu and Schweisfurth (2006) concerning the Chinese learners' intercultural experiences in both a Chinese and British context, a Chinese participant reported that his British instructor did not get a right sense of Chinese students and teaching, so it became uncomfortable for this participant to collaborate with the instructor and accept his proposed ideas.

Another issue under close consideration is the different perceptions of Special Education in China and Canada, including different definitions of people with disabilities (Deng & Harris, 2008; Ellsworth & Zhang, 2007; Kritzer, 2011). For example, many students in the United States lots are identified with a Learning Disability (LD), which is not universally accepted in China (Ellsworth & Zhang, 2007). Therefore, Special Education teachers in both countries should take such discrepancies into account.

Interviewee C commented that if an online course in Special Education in China were to use case studies, a difficulty could be that Chinese teachers and students do not have a great deal of experience in Socratic or participatory discussion in school and therefore it might be difficult to get online discussion or critique of case studies which is a key component of the Ontario online Special Education model. Interviewee C argued that,

It is much more difficult in China to get students to interact with other students or the teacher in discussion... the teaching style in China tends to be more rote learning, and more teacher-directed, in Canada students have a lot of experience of working in groups, and teachers use more discovery and guided learning approaches than teachers in China. (June 11, 2013)

The previous chapter's example of Chinese students' online course participation in a Canadian university illustrates the aforementioned point. However, Gu and Schweisfurth's (2006) research also shows the potential for change among Chinese students who have studied in the U.K.; one of the British instructors described a student who suffered from all kinds of difficulties in British university who then independently published some research later on. Accordingly, although Chinese teachers may encounter the same problems initially, they likely would adapt to some group and open study.

In China, there is also insufficient Special Education exposure for teachers, so a Canadian context based online course may be more difficult due to language and professional development issues. Interviewee B noted that

An online course in Special Education designed in Ontario might rely on Special Education learning materials in their teachers' college or schools which might be more sophisticated or unavailable to teachers in China and so the course designed for Canadian teachers may be more sophisticated and tougher for Chinese in-service teachers who have little or much less exposure to Special Education resources or students than their Canadian peers. (June 8, 2013)

One of the barriers to teachers enrolling in Special Education courses in China that was suggested by Interviewee C was a lack of opportunity for hands-on practice in Special Education or from a different perspective, a lack of opportunities to interact with and thereby become familiar with students with exceptionalities. In part this was seen as a function of having special schools for students with exceptionalities rather than having inclusive classrooms where students with exceptionalities would be in a regular classroom. It was posited that a lack of students with exceptionalities in regular classrooms meant that teachers and regular students simply did not have any chance to get to know or learn about students with exceptionalities. Teachers in regular classrooms and schools without special needs learners would not learn how to apply any strategies or lessons presented in a Special Education in-service class in any meaningful or practical way. This seems to be the equivalent of a teacher who goes to a conference and hears about a new strategy or technique but does not have any way to bring that strategy or technique back to the classroom; there thus would be little meaningful learning or chance that the teacher's practice is modified in any meaningful way by the new technique or

strategy. Interviewee C stated that,

I suppose the best preparation is practical, if a student teacher is in the faculty of education, the best preparation is to get them into a school, into the classroom to actually work with the students including special needs students in the classroom. Having a theoretical knowledge is good, but until you can apply it into the practice, it doesn't have a lot of meaning; I think people need the practicality of being in the classroom to work with students. (June 11, 2013).

The literature on Special Education teacher training in China and the comments of the interviewees for this study agree that in China Special Education teachers' professional development materials mostly emphasize and focus on theoretical knowledge rather than teaching strategies and skills development. Wang and Xiao (2012) reported that, "specifically, the special education teachers at different kinds of schools receive different types of professional training, generally speaking, all the materials focus on professional theories" (p. 262). Wang and Xiao also point out that teachers in China may be looking for more skills and hands-on training noting that

35% of teachers in special education schools expect to receive general professional skills training, and 43% of them would like to receive specific professional skills' training... only 22% of the special teachers believed that they would be trained on special education theories. (p. 263)

These statistics suggest that Chinese Special Education teachers would welcome specific skills training and in-service support in Special Education instruction. The findings from

this study support that view and it is a recommendation of this study that a pilot project using an online Special Education course developed in Ontario, modified for use in China with specific skills and hands-on activities development, could definitely work as a future research possibility. A caveat for such research would be that the Canadian online Special Education course reliance on practical case studies would need to necessarily research and find specific Chinese case studies to use and match with the needs and interests of Special Education teachers in China. Interviewee A shared a similar opinion based on first-hand experience of an online Special Education course taken in Ontario:

There were lots of case studies in the online special education course that I took. ...These were really beneficial, not only in learning theories, but also in providing some practical analysis, learning what to do in specific situations, which is integrated into working with the case studies. (June 3, 2013)

This may become a selling point of Canadian course because it is really what Chinese Special Education teachers need currently. Interviewee B stated that

There are differences in attitudes towards children and the relationship between teachers their students. Teacher preparation in Ontario schools appears to be more practical... in China it is more theoretical. ...Of course I work in teachers' education here in Ontario but I have taught in China as well and I feel that here ... in general teacher preparation is very practical, and it combines theory and practice, pretty comprehensively and in a hands-on style. ...I think all the

students like hands-on learning. Another difference is how students relate to their teachers here in Ontario. Here students challenging instructors is very normal ... not all students of course, but some students will and feel that it is their right to do so, but in China, rarely if ever will you see students challenge instructors...this is a major difference. So in China respect for instructors means the students don't challenge them, but here in Ontario there seems to me as someone who grew up in China to be less respect for instructors, more challenge to instructors and that is accepted. (June 8, 2013)

Asked to consider the barriers to introducing an Ontario-developed online Special Education course for teachers in China, participants mentioned the differences between Canada and China in terms of approaches to and philosophies of teaching and learning. Zhao and McDougall (2008) cite numerous studies (e.g., Ballard & Clanchy, 1991; Biggs & Watkins, 1999; Chan, 1999; Feng, 1991; Flowerdew & Miller, 1995; Gonz ález, Chen, & Sanchez, 2001; Kirby, Woodhouse, & Ma, 1999; Liu, 1986; Salili, 2001) that reported cultural factors which could impact Chinese students learning in Western universities; for example, academic values on learning and teaching, discipline, absolute obedience to teachers, highly hierarchical structure between students and teachers, and lack of creative and critical thinking. Participants generally spoke of a stricter approach to classroom management and discipline in China's schools and greater flexibility and student-centred attitudes in Canadian schools providing students with greater choice and involvement in everything from exams and classwork to after-school activities and social events.

Interview participants tended to comment on the relative limited choice options for courses and programs in China compared to Canada. Interviewee A mentioned that,

In China, school discipline is strict and students have less freedom of choice or options in their own studies. For example, for the homework, Chinese students are given a great deal of home while here in Canada homework seems to be limited and doesn't seem to apply to students until they are in high school.

Textbooks are different here in Canada as well. In China, generally, the teachers and students always use the same textbooks in a province and the examinations are specifically based on these textbooks but in Canada there seems to be more choices in textbooks and in how exams are used for assessment. (June 3, 2013).

The stricter, more standardized approach to curriculum and program options for students in China was also mentioned as part of teachers' professional development and in-service options for teachers. Interview participants felt that Ontario teachers had more choice with regard to the professional development courses and times or ways that these courses could be taken. They mentioned that AQ courses were offered everywhere and online options made them even more accessible to teachers across the province, even in remote or rural areas. In contrast, teachers' professional development or in-service learning for teachers in China is limited, inflexible in terms of content or delivery, and generally is only offered in traditional classroom settings at specific times of the year. Some literature also supports this point, noting that teachers' in-service training is limited by several factors including regional disparity, geographic barriers, high economic

burden, and insufficient providers (Wang & Xiao, 2012). Consequently, it can be concluded that a Canadian course may play a transformational role in Chinese in-service Special Education teacher training.

Deng and Harris (2008) cite several studies (e.g., Deng & Poon-McBrayer, 2004; Piao, 1992; Yang & Wang, 1994) that discuss how humanistic and sympathetic attitudes influenced by ancient Confucian philosophy towards people with disabilities evolved for more than 10 centuries, which has significant impact on the development of Special and Inclusive Education in China. In this tradition, the administrative power cannot be ignored: “the famous Confucian classic *Book of Rites* advocated that ‘all those who are bachelors, widows, orphans, single, disabled and sick should be supported by the government’” (Piao, as cited in Deng & Harris, 2008, p. 196).

Interviewee D argued that with regard to motivation to take an online Special Education course, perhaps school administrations or the government might need to offer more incentives or stronger support for Special Education in-service courses to encourage teachers:

In my view, I think there should be both internal and external motivations for taking any professional development course but especially a Special Education course. The external motivation is the desire on the part of the government to ensure that a certain level of professionalism or skill is in place for all teachers.... Here in Canada, it is compulsory for teachers to learn about Special Education in teacher training but it is not enough in most programs—only 20 hours of training

in pre-service programs and this gives a strong impetus to teachers to learn more about Special Education in professional development or in-service classes after they become teachers where they can get about 300 more hours of training in Special Education...making Special Education training mandatory means that teachers will eventually all get the training and see that Special Education is an important part of being a teacher and this may lead to an internal motivation to take Special Education courses... nowadays, in China, special education is unvalued and teachers sometimes even ignore learning anything about Special Education so ... I think the best way to motivate more teachers in China to learn about Special Education or to take Special Education courses, online or otherwise, should be the combination of internal and external forces that I mentioned—helping develop internal motivation by creating external forces that help teachers move in this direction. (June 16, 2013).

Deng and Harris (2008) agree with this opinion and commented,

To address this situation, there should initially be stipulations in place that the Ministry of Education at the central level and Departments of Education at provincial and local levels include systemic pre-service and in-service training for special education in their training plan. (p. 204)

All of the interview participants mentioned that they felt that people's beliefs in China around Special and Inclusive Education are changing in a positive manner and moving, albeit slowly, to align more closely with Western beliefs about how learners with

exceptionalities should be treated in schools. This belief in positive change seemed to result in a belief that a Canadian online course for Special Education teachers could serve as an impetus for positive change in Special and Inclusive Education serving as what Interviewee C termed a “lubricating fluid in this transformational process.” Interviewee C stated for example that,

I think acceptance and understanding is very important. ... These are people and they deserve access to education, and that is the no.1 factor for having special education. ... It is very easy to change the materials or build the buildings, but changing people’s beliefs, I think is profoundly more difficult but, I think people’s beliefs are changing. They are starting to realize someone maybe deaf, crippled, or a slow learner, but they are still human beings and they are worthy of respect, worthy of having the same access, level and quality of education. I think a change in people’s beliefs and attitudes is happening. I think the fact that research such as what is being done by this study and this questionnaire is proof of this happening. (June 11, 2013)

A natural conclusion from an analysis of the questionnaire and interview data for this study is that participants would support the introduction of a Canadian online Special Education course for teachers in a Chinese school district as a pilot test in order to find out what practicing teachers felt about such a program and in order to provide new iterations of the course which would better reflect Chinese realities and resources for working with students with exceptionalities in the regular classroom.

Interviewee C noted that any segregation system of Special Education such as the system that was used in Canada 50 years ago or the system that seems to be still used in parts of China tends to prevent the vast majority of teachers and the general population from learning about people with exceptionalities or understanding the role of Special and Inclusive Education in general. According to the official statistics corresponding to Special Education in 2008, 14,489 out of a total 15,173 classes are in Special Education schools (China Education and Research Network, 2010).

Interviewee C, who has worked with and communicated with many Chinese educators in several schools in China, stated that

I think what I see is China is moving closer to the Canadian model of Special and Inclusive Education, the concept of accepting special needs children in regular schools and classrooms and having regular teachers—trained through Special Education courses—working with them; however, having said that, I also understand that in the recent past in China a student who is severely mentally disabled was simply not allowed to go to school, they were kept at home. The parents raised their child without formal education but now China is struggling to try to modernize and accept special needs students in schools and China is doing what Ontario did 30 years ago, struggling to find a place for special needs students. ... There used to be many special schools in Ontario, those schools almost do not exist anymore in Ontario. Almost all students with special needs are in the regular school system and regular classrooms...in China to my

knowledge and experience still has special schools and formal schools for students with exceptionalities but China is trying to catch up and they are using other countries Australia, Canada, USA, England, as models and are learning quickly. ... The big issue for China might be the big population and getting enough teachers trained to move forward as quickly as they want to. (June 11, 2013)

Wang and Xiao (2012) note that in China “inclusive education pre-service teacher professional training has not formed a completed system” (p. 296). The implication is that such training is still in development or there is no formal program of study which all teachers can undertake. Wang and Xiao argue that the scarcity of Special and Inclusive Education training programs in China results from the lack of teacher training institutions or normal universities that have Special Education courses or courses including Special Education content. Also, some short and temporary teachers’ in-service training programs which can meet the urgent needs of teachers in LRC programs actually negatively influenced the promotion of long-term and comprehensive teacher-training plans (Deng & Manset, 2000).

This situation in China provides an opportunity for international cooperation on Special Education courses. Ontario’s education system in Canada has an abundance of Special and Inclusive Education courses and program options, most of which are available online to teachers, thus making them technologically available to teachers in China. The constraints as have been pointed out in this study are not so much

technological capability but rather ensuring local content and involvement and encouraging more teachers, school administrators, and education government officials in China to see the potential benefits of international cooperation in teacher Special Education training online. Such an approach would benefit many schools in China in terms of developing collaboration and uniformity in Special Education teacher training and understanding. Interviewee D noted, for example, that

In China, special education teachers' training, basically, involves mutual communication and informal sharing of information and resources between different schools. If a school has a satisfactory or excellent reputation in working with special needs students then teachers from other schools will come to visit and learn...it is an informal system. Also there is little communication between special education teachers and regular school teachers in China... I think there is little opportunity for sharing and communication between special education teachers and regular schools teachers and that doesn't help develop special education skills. (June 16, 2013)

Interviewee B said that

An Ontario developed online special education course would at least be a good model for a Chinese developed approach, or program or materials that could be introduced to school districts across the country. ... We do need more advanced and mature programs to learn from...China is open to so many different approaches. Over one million students have gone overseas in the past 30-40 years

and we are learning about how education is done in maybe 200 countries. ...

These students bring back different ideas and we learn from all of them so why not use an Ontario online Special Education course to see if it will work... we can surely learn from the model and use it to help Chinese special needs students.

(June 8, 2013)

Conclusion

This study examined the efficacy of using an Ontario-developed online Special Education teacher training course as a model for teacher professional development in Special Education in China by gathering the perceptions of a group of classroom teachers, educational administrators, and teacher-educators familiar with online education generally and more specifically with the education and teacher preparation systems of Canada and China. The participants in the survey and interviews generally supported the idea of an Ontario-developed online Special Education course in China with significant modification including local input and cases that reflect and capture the needs, issues, and resources available in the Chinese education system for students with exceptionalities. Interviewee C noted that,

I think in a few years, Chinese governments are going to decree that every school in China must have a special education trained teacher or person at the school and students with exceptionalities will be included in regular classrooms. When that happens and I am sure that it will then Special Education in China will take a great leap forward. (June 11, 2013)

A final caveat or consideration for future research was provided by Interviewee D who commented on the industrialization or commodification of education in China, especially education that was foreign based or developed, and suggested that if an Ontario-based course in Special Education is to succeed in China at all it must work on a non-profit basis which goes against the industrialization model. Interviewee D argued that the only way that such a non-profit course could work is if it received substantial support from high-level government supporters. Interviewee D stated that

Currently Special Education in China is a non-profit educational offering but if it is to be commodified or industrialized, who would do it and why? There is no money to be made in Special Education unlike Medicine or Law or Business Administration. Nowadays, the industrialization of education is in fields that can earn you money. ...

If we would like to introduce this course to China, we should find people who are in power in education and strive for special education or international education cooperation and talk about this to them and all the committee members...we would need to find leaders who are in charge of this and believe that an online course in special and inclusive education would benefit teachers, schools and students with exceptionalities in China. This process actually is pretty easy; we could take this course to online course association and sell the materials...it depends on people's capacity of acceptance. (June 16, 2013)

The results of this study and its findings support the belief that an Ontario-

developed online Special Education course for teachers could be used as a model for teacher training and in-service development in China. The findings and participant perceptions and comments support a future pilot test and future development of a made-for-China model of online Special and Inclusive Education as a means of helping develop greater teacher understanding and acceptance of Special and Inclusive Education in the Chinese school system, and I do believe that this online course will eventually make Chinese Special Education strive for greatness and change the whole society. Interviewee D's response when asked if this training could be accomplished in an online course provides an appropriate concluding remark for this study:

Actually, in China, a lot of students with special needs stay at home. Using online education to educate Special Education teachers is useful because it could give all of these teachers and even parents of special needs students at home the sense that we should be paying more attention to these people with special needs. When leaders, parents, and teachers get that sense it will be much better for Special Education in China. ... It will be much less complicated to promote Special Education, accept students with special needs, and get more Special Education teachers' training programs. (June 16, 2013)

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Appendix A

Interview Protocol and Questions

Interview Protocol for exploring the use of a Canadian Online Special Education Course for Teachers as a Model for Special Education Teacher Training in China

Interview Protocol:

Interviewee Name: _____

Interviewee Age: _____

Interviewee Gender: _____

Interviewee Current Position: _____

Interviewer: _____

Other comments and emerging questions

Introduction

You are invited to speak with us today because you have been identified as someone who has experience of the Chinese and/or Canadian educational system, are familiar with Special Education generally and how teachers in Canada or China are trained to work with Special Education students, as well as having some exposure to online education in either country. The interview will take approximately 45 minutes and will be audio taped and later transcribed for analysis by the principal researcher Hekun Gao and the principal researcher's faculty supervisor Dr. Tony Di Petta. You will recall that you were asked to sign a participant agreement release form authorizing the researcher and faculty advisor to conduct this interview and to have it transcribed for analysis. We would like to reiterate that you are free to speak with us or not and to answer any or no questions as you deem appropriate and that there is no penalty or consequence associated with your decision in any way.

If you decide to be part of the interview it will be digitally recorded and transcribed by the student researcher and you will be provided with a transcript of the recording for you to verify or clarify and you are free to withdraw from the study or this interview at any time and the information will be removed and destroyed and not used in the study findings or discussion. For your information, only the principle researcher and the faculty supervisor on the project will have access to the tapes and transcribed interviews. All data will be stored on a secure computer in the Supervisor's office and all data will be destroyed within six months of completion of the research project. In addition, the participant agreement form you signed states that: (1) all information from this interview will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) this study and your participation in it will not in any way, financially, professionally, physically or psychologically do you any harm.

This research project explores teacher preparation programs in Canada and China with a focus on Special Education training with a view to exploring the potential of using online Special Education programs for teachers developed in Canada in the Chinese education context. We are examining the perspectives and understanding of Canadian and Chinese trained teachers around online education as a means of teacher training with a specific focus on Special Education offered as an online course for teacher professional development. We hope to share what we learn with Chinese teachers and education administrators and make a difference in Chinese teacher preparation for Special Education. Our study does seek your views on online teacher education, teacher preparation for Special Education, and how online programming prepared in one country might serve as a model for special education online programming in another country – in this case specifically China.

Thank you for your agreeing to participate.

We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you in order to push ahead and complete this line of questioning documents.

INTERVIEW QUESTIONS:

1. Please tell us a little about your academic background and why you decided to become a teacher?

2. How are Canadian teachers and Chinese teachers similar or different in their attitudes towards teaching, teacher preparation and beliefs about their students?

Probe – What motivates teachers anywhere to teach? What should teachers do if they have students with special needs in their classes? What supports should they be given? How would you change teacher preparation around Special Education if you could?

3. In your opinion or experience, what is the formal definition or teaching approach to preparing teachers for Special Education offered in the teacher preparation program which you graduated from?

Probes: Is it working or effective and appropriate for preparing teachers for Special Education? Do you feel prepared to work with students with special needs in your own classes? – Why or why not?

4. This study focuses on Special Education and Online Education. In Canada and Ontario specifically, special education has a legally established definition and regulations established by the provincial government through the Ministry of Education. Please talk about what your definition of Special Education is and your experiences of, or background in, Special Education training for teachers?

Probe – should teachers be trained in Special Education? Why? Why not? How should they be trained?

Probe – In your experience or opinion is Special Education viewed differently in Canada and China? Please explain.

5. From your perspective and background, how is Special Education viewed and applied differently in China and Canada? Does culture and local experience make a difference on how Special Education is taught or applied in education in China and Canada?

Probe – If we want to introduce a Canadian interpretation of Special Education into the Chinese educational context what should we pay attention to and what should we focus on?

Probe – Would an online Special Education teacher training course developed for Canadian teachers be an effective Special Education training tool for Chinese teachers? Why, why not?

6. Have you taken any online courses or online teacher preparation workshops generally and Special Education courses or workshops specifically?

Probe – what do you think of online courses for teacher preparation? Do you think online Special Education courses are an effective way of preparing teachers to work with students with special needs? Why, why not?

7. Do you or your colleagues feel prepared for Special Education? Would you feel better prepared if you took an online Special Education course that was approximately 100 hours in duration and was based on actual cases or situations of Special Needs in Canadian schools? Why or why not?

8. In your opinion what are some of the major challenges in attempting to introduce an online Special Education course developed in Canada into another country's education system? What are the opportunities? How can opportunities be maximized?

9. What would motivate you to participate in an online Special Education course or program for teachers?

10. Do you have any other comments or questions that we have not raised in exploring how a Canadian online Special Education course might be used in the Chinese education system or context?

Post Interview Comments and/or Observations:

Appendix B

Invitational Letter (Interview)

Exploring the Use of a Canadian Online Special Education Course for Teachers as a Model for Special Education Teacher Training in China

Mar 6th, 2013

Title of Study: The Discussion of Efficacy in Terms of Benefits and Barriers to Using an Ontario, Canada Developed Online Special Education Course for Teachers as a Model for Online Teacher Special Education Training in China

Student Principal Investigator HEKUN GAO, Student, Faculty of Education, Brock University

Faculty Supervisor DR. TONY DI PETTA, Professor, Faculty of Education, Brock University

INVITATION

I, **HEKUN GAO**, student, Brock University, am now working on my major research paper which is being conducted to fulfill my master's degree requirements and would like to invite you to participate in a research project entitled above. The purpose of this research project is to examine the efficacy in terms of benefits and barriers to using an Ontario, Canada developed online Special education course for teachers as a model for online teacher special education training in China.

WHAT'S INVOLVED

In this research, you are invited to participate in a single one-on-one interview examining their perceptions and opinions around the focus of this study – the potential for using an Ontario online Special Education course as a model for Special Education teacher training in China.

It is conducted at mutually convenient location between you and me for approximately 45 minutes and no longer than 1 hour. During the interview, we will ask about your general academic background, any teacher training program in China or Canada, the experience with online education and any special education experiences in Canada or China that you may have had. Your views on these topics will be used to discuss the topic of this study.

POTENTIAL BENEFITS AND RISKS

This study examines the potential for using an Ontario-based online special education training course for teachers as a model for providing special education training to teachers in China. The benefits of the study include the development and offering of a special education course for teachers in China that meets their professional development needs, and it is based on tried and tested special education practices in Ontario, which has been developing and offering special education training for teachers for more than two decades, and which can be tailored or adapted based on the findings and ideas generated from this study to meet the specific cultural or local needs of Chinese teachers and the Chinese school system.

You will not be affected in any way, physically, financially or academically by a decision to participate or not participate in this study. Employment or academic status will not be effected in any way.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Furthermore, you may decide to withdraw from this study at any time, you will not be affected in any way, physically, financially or academically by a decision to withdraw from this study. Employment or academic status will not be effected in any way.

CONFIDENTIALITY

For the issue of confidentiality, in this study, only the Student Principal investigator and the Faculty Supervisor on the project will have access to the tapes and transcribed interviews. All data will be destroyed within 6 months of the completion of the research project.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Specific information about participants will not be presented. Only general trends and patterns will be reported. Feedback about this study will be available when the project is finished.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext. 3035, reb@brocku.ca)

If you have any questions, please feel free to contact us (see below for contact information).

Thank you for your assistance in this project. Please keep a copy of this form for your records

HEKUN GAO (Students Principal investigator)

DR. TONY DI PETTA (Faculty Supervisor)

HEKUN GAO

Student

289 969 2318

hg11ez@brocku.ca

DR. TONY DI PETTA

Professor

905 688 5550 x 4729

tony.dipetta@brocku.ca

Note: This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board (file#12-246 - DI PETTA)

CONSENT

I agree to participate in this study described above. I have made this decision based on the information I have read in this Invitational Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____

Date: _____

Appendix C

Questionnaire

A Questionnaire Exploring the use of a Canadian Online Special Education Course for Teachers as a Model for Special Education Teacher Training in China

This survey is part of the research study examining the potential of using online special education training courses for teachers in Ontario, Canada as a model for online special education courses for teachers in China. The survey is anonymous and results will be used to establish trends and patterns only. Participation is voluntary and respondents may answer any or all of the questions or refuse to participate at their discretion. Questions or comments about the survey can be addressed to the student researcher Hekun Gao at gaohekun17@gmail.com or Dr. Tony Di Petta, faculty supervisor at tony.dipetta@brocku.ca. This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board (file#12-246 - DI PETTA)

Online Special Education courses are offered in Ontario, Canada as part of teacher Additional Qualification or professional development. These courses are accredited by the Ontario College of Teachers and offered by regulated providers as training courses to help teachers understand and implement curriculum, techniques, and teaching methods related to working with students with exceptionalities or special needs such as autism, hearing, visual, or physical impairment, ADHD and cognitive disability, learning disabilities and associated behavior management, and giftedness. A primary focus of Ontario's Special Education approach and philosophy for teachers is inclusion which is defined as working with students with special needs in the regular classroom rather than withdrawing them to special schools or settings.

This survey uses a Likert scale— Circle the number that best represents your agreement or disagreement with the statements made.

The Survey starts on the following page:

Q1. I know about special education and know how to teach special education students.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q2. Special education is for students who are physically or mentally disabled.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q3. Special education should include students who are gifted or talented in some special way.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q4. All regular teachers should be trained in special education.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q5. Regular teachers would benefit from being trained in special education components via online education.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q6. Online special education courses are an economical solution to teachers' training for special education.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q7. Online special teachers' training approaches and face-to-face approaches should be combined to promote special education for teachers' preparation.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q8. The inclusive education for students with special needs, which is the approach to include students with special needs in regular classroom, is and should be the fundamental component of special education.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q9. The inclusive approach for special education can be used in developing countries with a large population, like China, India, etc.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q10. Canada's online special education courses to preparing teachers are a good model for large population developing countries such as China and India.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q11. Canada's online special education courses to preparing teachers is a model which will work well anywhere in this world.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q12. Canada's online special education courses will have to be significantly modified for use in developing countries such as China or India.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Q13. Canada's online special education courses can be translated into another foreign language like what as is in developing countries such as China and India.

1 2 3 4 5

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
-------------------	----------	-------------------------------	-------	----------------

Thank you for your participation on this survey.

Q14. Would you be willing to participate in a one-time interview in which you would be asked to talk about your perceptions and opinions about online teacher Special Education training in Canada and China?

YES

NO

If you agree to be interviewed concerning this topic, please leave us your contact information. We will contact you at your convenience. Thank you!

NAME:

TELEPHONE:

E-MAIL ADDRESS:

Appendix D

Invitational Letter (Survey)

Exploring the Use of a Canadian Online Special Education Course for Teachers as a Model for Special Education Teacher Training in China

Mar 6th, 2013

Title of Study: The Discussion of Efficacy in Terms of Benefits and Barriers to Using an Ontario, Canada Developed Online Special Education Course for Teachers as a Model for Online Teacher Special Education Training in China

Student Principal Investigator HEKUN GAO, Student, Faculty of Education, Brock University

Faculty Supervisor DR. TONY DI PETTA, Professor, Faculty of Education, Brock University

INVITATION

I, **HEKUN GAO**, student, Brock University, am now working on my major research paper which is being conducted to fulfill my master's degree requirements and would like to invite you to participate in a research project entitled above. The purpose of this research project is to examine the efficacy in terms of benefits and barriers to using an Ontario, Canada developed online Special education course for teachers as a model for online teacher special education training in China.

WHAT'S INVOLVED

In this research, you are invited to participate in a one-time questionnaire gathering your views and general information on special education, teachers' training programs,

online education and efficacy of using Ontario developed online special education courses as a model for use in China.

POTENTIAL BENEFITS AND RISKS

This study examines the potential for using an Ontario-based online special education training course for teachers as a model for providing special education training to teachers in China. The benefits of the study include the development and offering of a special education course for teachers in china that meets their professional development needs, and it is based on tried and tested special education practices in Ontario, which has been developing and offering special education training for teachers for more than two decades, and which can be tailored or adapted based on the findings and ideas generated from this study to meet the specific cultural or local needs of Chinese teachers and the Chinese school system.

You will not be affected in any way, physically, financially or academically by a decision to participate or not participate in this study. Employment or academic status will not be effected in any way.

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Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Furthermore, you may decide to withdraw from this study at any time, you will not be affected in any way, physically, financially or academically by a decision of withdrawing from this study. Employment or academic status will not be effected in any way.

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PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Specific information about participants will not be presented. Only general trends and patterns will be reported. Feedback about this study will be available when the project is finished.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext. 3035, reb@brocku.ca)

If you have any questions, please feel free to contact us (see below for contact information).

Thank you for your assistance in this project. Please keep a copy of this form for your records.

HEKUN GAO (Students Principal investigator)

DR. TONY DI PETTA (Faculty Supervisor)

HEKUN GAO

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289 969 2318

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DR. TONY DI PETTA

Professor

905 688 5550 x 4729

tony.dipetta@brocku.ca

Note: This study has been reviewed and received ethics clearance through Brock

University's Research Ethics Board (file#12-246 - DI PETTA).

CONSENT

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Name: _____

Signature: _____

Date: _____